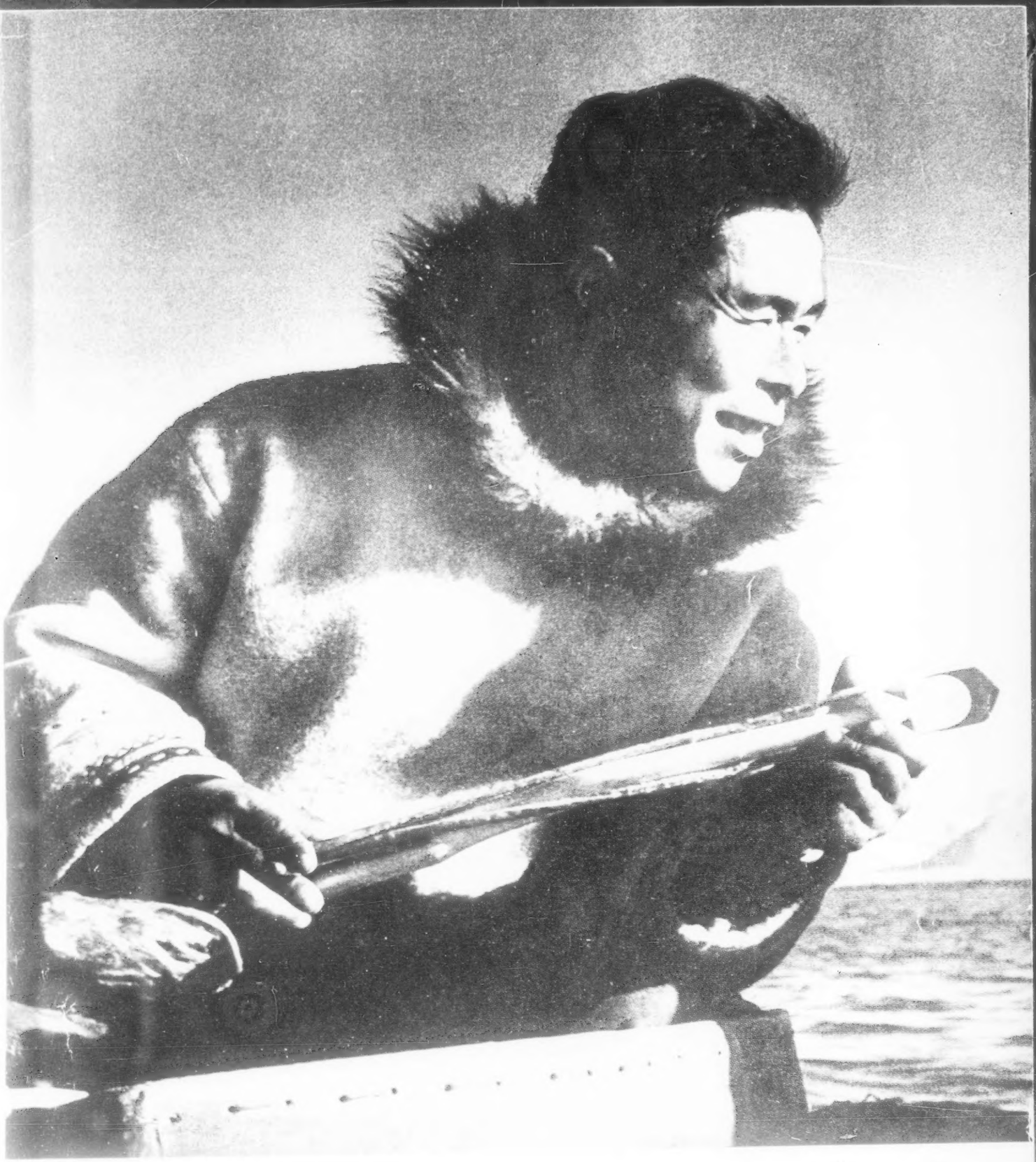

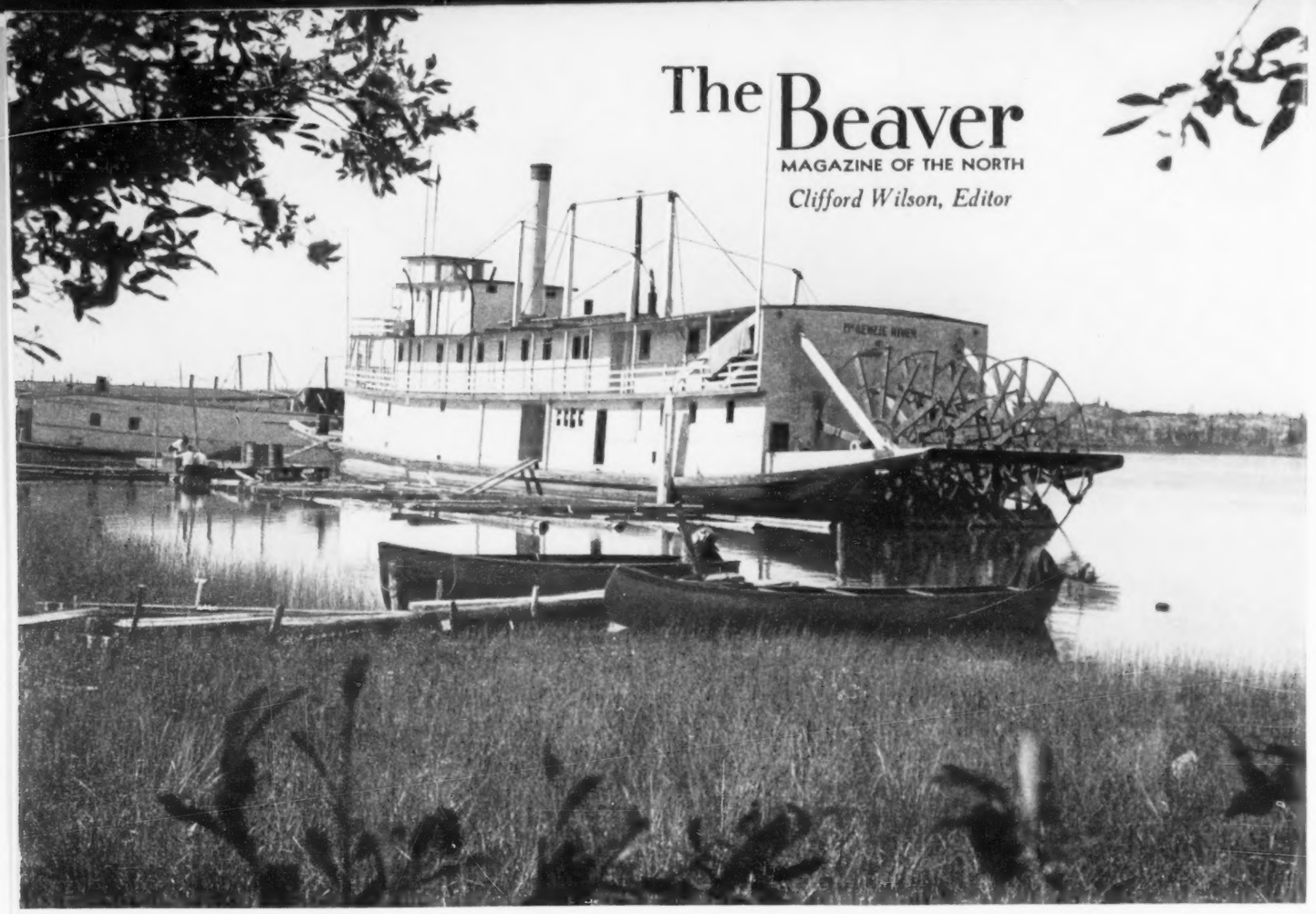

The Beaver

MAGAZINE OF THE NORTH

Clifford Wilson, Editor

The old "McKenzie River," now used as a bunkhouse for commercial fishermen in Yellowknife Bay.
J. H. Whyard

CONTENTS

OUTFIT 286 SUMMER 1955

The Formative Years—Margaret Stobie ... 3

Naturalists on Back River—
R. J. Wilkie and W. J. Breckenridge ... 9

Northwest Passage Patrol—T. A. Irvine ... 14

Fifty Years of Prairie Farming—
Grant MacEwan ... 19

Arctic Schooner Voyage—E. O. Hohn ... 24

St. Lawrence Seaway-IV—
Rosemary Gilliat ... 28

Pacific Coast Fur Trade—Corday Mackay ... 38

Amundsen's "Maud"—W. G. Crisp ... 43

York Fort, 1714-16—T. E. Tyler ... 48

Baffinland Adventure ... 51

Summer Packet ... 53

Northern Books ... 55

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THE FORMATIVE YEARS

I - Struggle for Rights

The discomforts through which Saskatchewan moved towards provincial status are seen through the eyes of the famed "Saskatchewan Herald" in this first article of a series on the province's growth.

By Margaret Stobie

IT seems but a little while ago when the Portage [La Prairie] was considered to be the last point to which civilization extended, and at which home comforts could be had. Now, however, a man may leave Winnipeg and find a house to sleep in every night until he passes Shoal Lake—a distance of two hundred miles; and this year the line of settlement will extend still farther westward."

So Patrick Gammie Laurie wrote from Battleford on August 25, 1878, in the first issue of his newspaper, the *Saskatchewan Herald*. He had arrived from Winnipeg two weeks before, having made the journey of some six hundred miles with the plant of his newspaper packed in ox-carts. It had taken him over two months.

The country into which he came was one of vast solitudes peopled with some twenty thousand semi-nomadic Indians, about three thousand half-breeds, and a minute white population in police, trading, or mission posts and in occasional settlements around them. To the south was a series of such posts—Fort Qu'Appelle, Wood Mountain, Fort Walsh, Benton, Fort Macleod and Fort Calgary—and scattered around the last two were the first of the great ranches of the Bow River country. Far to the north, on Peace River, was the trading post and mission of Dunvegan. In between, along the North Saskatchewan River, which was the main route of trade, were the two most considerable clumps of settlement—Edmonton, on the west, with near it the mission of St. Albert and the police post of Fort Saskatchewan, and seventy-five miles downstream, the settlement of Victoria. Some five hundred miles along the river to the east was a more populous district around Prince Albert, that included the settlements of Fort Carlton and Duck Lake. Between these two areas was the newest settlement of Battleford. The *Herald* describes it as "the seat of Government, the Headquarters of Indian Affairs in the North and of the Mounted Police, and an important business centre." And so it was; but only two years before it had been simply the place in the rolling uplands where the Battle and the Saskatchewan rivers quietly flowed together.

Two years before was the important date, for it was in 1876 that the Dominion Government made the North West Territories into an organized district with its own Lieutenant-Governor, an appointed council, and one elected member. This was the founding legislation; the B.N.A. Act of the Plains.

Having created the Council, the Government then created a permanent capital for it—chose the site, named it, and built the necessary offices. When P. G. Laurie arrived there, he found a tiny settlement on the south bank of the Battle River with the government buildings near the top of the bank (upper town), the settlement proper in the flats (lower town), and on the opposite side, at the edge of a high plateau set well back from the river, the log buildings of the Mounted Police. But he had come to the centre of news, for not only were all the branches of government here, it was also the one spot on the North Saskatchewan that the Canadian Pacific telegraph line served, and of course the railway company planned shortly to build its road along this surveyed line.

The story that his paper tells from this time until the forming of the provinces in 1905 is the story of many things. It's the story of the disappearance of the hunter and the coming of the farmer. It's the story of grist mills and saw mills, of schools and churches, of brass bands and penny readings, of bridges and ferries, of mail routes, surveys and railroads. It's the story of the coming together of many peoples. But most of all it's the story of the struggles, sometimes reasonable, sometimes not, for what people felt were their rights: the right to live as they chose to live; to hold land that they had held; to govern themselves according to their needs—Indian rights, half-breed rights, squatters' rights, settlers' rights, immigrants' rights, the Territories' rights. Some of the struggles failed, but the Act that ends the period names the goal towards which the individual strivings reached: the Act of Autonomy.

The first problem that stirred the Territories was one of Indian rights. The Indians wanted a better treaty. In February of 1879, Father Lestanc wrote in a letter from Red Deer Forks: "All the tribes—Sioux, Blackfeet, Bloods, Sarcees, Assiniboines, Stoneys, Crees and Saulteaux—now form one party having the same mind." And Big Bear was their leader.

An alarming thing had happened that no one—neither the Indians nor the Government—had foreseen when the treaties were made. The buffalo had suddenly and dramatically disappeared from the plains. No one quite understood why, though one aged Indian had an answer. It was a punishment, he said, that had come upon the

Mrs. Stobie is heard frequently on C.B.C. She has recently given a series of broadcasts on Dr. John Rae.

This 1881 map shows part of the great North West Territories of the period. Published by the Dominion Lands Office, Ottawa, it shows the scattered centres of population, and in the shaded blocks, the Indian reserves.

Indians for selling their lands. "Everything the Indian held was only in trust and to sell any portion of it was sure to bring disaster upon the offending tribes;" the annihilation of the buffalo was one of the evils; sickness and war would follow before his people paid for the sin of selling their country. Big Bear, who had refused to come under the treaty, had a different view: "Before the white man came, the Indians had everything they wanted; now that the Government has taken their land, it should provide for them."

No buffalo came that spring, and during the following months many of the Indian bands converged on Battleford to ask aid of the Lieutenant-Governor. At the high point of the movement, the *Herald* reports: "There are now here about one thousand Crees, Blackfeet, Sarcees and Stoneys . . . The condition of these Indians is deplorable in the extreme . . . Our markets are bare of all kinds of provisions except flour and a little game . . . It is most necessary that the Government move quickly . . . If the Government at Ottawa were here, isolated from the outside world, surrounded by a thousand Indians starving and begging for food, they would bestir themselves."

To add to the misery, the money and the treaty goods for the annual payments in August were late; at Battleford they were seven weeks overdue, and Laurie bursts out angrily: "If any trouble arises it will be wholly due to the criminal negligence of the Indian authorities at Ottawa, who are responsible for the present muddle."

The next two years were terrible ones for the Indians; everywhere on the plains, the word was the same: "No buffalo north of the border." And Laurie reflects the sympathy, alarm and anger that were general among the

white settlers. Official reports were sent to Ottawa: "The Indians are being brought face to face with starvation. Hungry men are dangerous men, whether they be Indians or whites." But throughout those two years the same dreadful news came in. Fort Macleod reported, "the Blackfeet are dying daily of starvation." The Indian agent at Touchstone warned, "the coming winter will be the hardest ever experienced by the Indians of the Plains." At Edmonton, "nothing but accounts of suffering and starvation are coming in." And so it went on through the spring of 1881.

Even among the bands who were in less desperate need, there were other reasons for apprehension, for the Government was recalling some of the agents whom they had come to know and to have confidence in. A deputation of chiefs from the Indians of the Battleford area visited their departing agent: "We have heard that you are going away and we are sorry for it. We know you, and you know us and everything that has been done. If a new man comes we will not know him, and he will neither know us nor what has been done. We are afraid that if you go away matters will not go on smoothly. If it rested with us you should not go away."

Yet that far-off, intangible and erratic force called the Government, in spite of its signal failure to meet desperate emergency needs, was making its way, like the slow ox-cart brigades, towards a planned and reasonable goal. It had long been clear that some day the buffalo would go, and that when they did, the whole life of the Indians would have to change. Meantime it would be essential, if the Indians were to keep their independence, to help them in finding some other means of getting their livelihood. It was a wiser plan, for the good of his people, than Big Bear's was.

Already some Indian farms had been begun in the south, a certain number of farm instructors had been sent in—

The Legislative Council of the N.W.T. in 1881. L. to R., top row: Pascal Breland, Indian Commissioner; J. G. Turriff, Moose Mountain; Lt.-Col. A. G. Irvine, Commissioner, N.W.M.P.; J. C. C. Hamilton, Broadview; Frank Oliver, Edmonton; A. E. Forget, clerk of the assembly. Middle row: Wm. White, Regina; J. D. Geddes, Calgary; Major Hayter Reed, Asst. Indian Commissioner; D. H. MacDowell, Lorne; J. H. Ross, Moose Jaw. Bottom row: Judge Richardson; Hon. Edgar Dewdney, Lieut.-Governor; Judge Rouleau; T. W. Jackson, Qu'Appelle. Absent: Lt.-Col. J. F. MacLeod, C.M.G.

with seed, implements and cattle—to teach the bands on the northern reserves, and industrial schools were to open shortly for the children. But the change had come too suddenly and it was hard. To many of the Indians it seemed that on top of their misery the Government had piled the indignity of yoking them to the plough.

It was with some such feeling that Poundmaker, who had taken a reserve near Battleford, rode off on an angry jaunt in the spring of 1881. He scoured the plains for game but found none. Returning, he acknowledged the wisdom of the Government's plan, and at the New Year he gathered his people and addressed them: "We must work hard and sow as much as we can and take good care of our cattle. Next summer, or at latest next fall, the railway will be close to us, the whites will fill the country, and they will dictate to us as they please. It is useless to dream that we can frighten them; that time is passed; our only resource is our work, our industry, and our farms . . . Send your children to the school. It is nearly two years since I sent my son to St. Albert. Some day he will be able to help himself and his fellow men. He will be able to speak English and French, and he will be able to read and write; besides, he will know how to work like a white man. Do the same for your children, if you want them to prosper and be happy."

Crops had been good that year, and the Indians who had farmed were proud of their harvest. Miraculously a great abundance of game had filled the plains in the fall. The immediate distress was over, and it looked as though it might be simply a matter of time until "the Indian problem" would settle itself. But it was very clear that the fact that there had been no serious trouble was due to the remarkable forbearance and good sense of the Indians rather than to good management on the part of the Government.

The white settlers turned now to a new excitement and a happier one. The railroad was coming. There were disquieting moments, for there had been many shifts in plans since the original route of the telegraph line had been surveyed, but as late as April 1882, the people of Edmonton were confident that it would come to them. In May, however, the *Herald* has a solemn note: "The latest maps filed with the Government show the route of the main line of the C.P.R. extending from Fort Calgary westward through Kicking Horse Pass." Still, the excitement mounted when, in July, the tracks crossed the Manitoba border into the Territories.

In September the blow fell. A new permanent capital had been chosen and named. Laurie was outraged; not only the railroad route, but all glory had departed from the north. He devotes a full page to quotations from the press—some of them sounding suspiciously similar from "Correspondence" in eastern papers—all pouring scorn on Pile-of-Bones, renamed Regina. But Regina went on, and so did the railroad.

In February, 1883, Qu'Appelle built immigrant sheds to shelter the throngs of settlers. By March, Regina had applied to the Dominion Government for an act of incorporation as a town. In May, "Moose Jaw wants a post-office; Moose Jaw is going to have a school. Moose Jaw wants a barber, a harness maker, a tinsmith and a shoemaker. Steps are being taken towards incorporating Moose Jaw as a city." In June, Swift Current rises, but in September, "Another city of the plains has all but disappeared. The railway is opened to Calgary, and simultaneously with this change the bulk of the floating population and transient traders who have been sojourning at Swift Current betook themselves to the cars and moved in a body to the newest Mecca at Calgary." By December, "The track of the C.P.R. is laid 121 miles beyond Calgary." The road had passed off the plains and out of sight. Even the aggrieved northern settlements had benefitted to some degree, for now the brigades of carts had only to go two hundred miles to fetch supplies, and shortly Laurie is pleased to announce, "Fresh apples, oranges and lemons have made their appearance here."

In the meantime, however, an event of high note had taken place at Regina in September. The North-West Council had held its first session there, and Laurie quotes from the *Regina Leader*: "The session of the North-West Council was opened at Regina on the 22nd with great ceremony, in the presence of a large and fashionable audience." There had been a grand procession, with the clergy coming first, then, in the Governor's carriage surrounded by an escort of sixteen mounted men, Lieutenant-Governor Dewdney and his aide-de-camp. The bugler blew a flourish as the carriage arrived at the Council Chambers.

The Mounted Police post at Battleford, as it appeared in 1885.

The presence there of six elected members testified to the growth of the Territories, for at the last session only the district of Prince Albert had met the electoral requirements of one thousand adult inhabitants, exclusive of aliens or unenfranchised Indians, in an area of not more than one thousand square miles. This time, Edmonton had made the grade, and there were four members from the new centres in the south: Broadview, Qu'Appelle, Regina and Moose Jaw.

At once the Council began vigorously to demand the rights of the Territories, for the settlers, like the Indians, wanted a better treaty. A list of some sixteen requests was drawn up for immediate action by the Dominion Government. The list included the granting of a subsidy per capita for expenditure by the Lieutenant-Governor in Council; the abolition of excessive duties on agricultural implements imported into the Territories; the representation of the Territories in the Dominion Parliament; and the granting of greater powers to the North-West Council.

The requests had at least one definite result before the year was out; an Order-in-Council gave the Territories the right to establish municipalities. A town must have a population of not less than three hundred, a city not less than two thousand.

Several of the requests, however, had to do with land rights—squatters' rights, settlers' rights, half-breed rights—for again like the Indians, the settlers were alarmed at what the Government was doing.

One ruling—that on squatters' rights—had been obtained the year before, though it was a ruling from a district court and not from the Government. A man in Battleford had foolishly—or perhaps fortunately—tried to jump the claim of the superintendent of the Mounted Police there. The case came up for trial and the decision was handed down establishing "the right of a settler to select his own location and to maintain possession of it against all comers until the Government has passed on his right to it."

But that was the rub. In the absence of surveys the settlers were in a precarious position, for the Government had already set aside large reserves of land, but no one knew exactly where they were. The *Herald* sums up the settlers' quandary: "In addition to alternate lots reserved for purposes of the railway, there is one twentieth for the Hudson's Bay Company and two sections in each township for schools. The settler—squatter, if you like—has to take the chance of settling on a H.B.Co. lot. If he does, as the law now is, he must accept the Company's valuation and pay for it. The chances are again equal that he will be on a school lot. On the remaining lands the chances are just equal that he will drop on a railway section instead of an open one. Here again he must pay the fixed price." Moreover, the Government was proposing to grant large land blocks at reduced prices to the private "Colonization Societies" that were rising and bursting like bubbles. The North-West Council and indeed the whole population of the Territorities protested loudly. "A fair field and no favour," was the cry.

When the Government surveyors did come, matters became even more chaotic for many of the older settlers. In the Bow River Valley, it was discovered that the Government was leasing to newcomers land that the original ranchers in that area had held for several years as cattle runs. The leases were made without notice or enquiry. In a number of settlements along the Saskatchewan another kind of difficulty arose that had to do with the system of survey. The Government's engineers had a touching faith in the inherent virtue of the grid pattern, and so the whole of the plains—rivers, valleys, lakes, uplands and woods—was being laid out in neat squares. Even the streets of the towns all ran in straight lines. The result was that in February of 1883, Father Le Duc passed hastily through Battleford on his way to confer with the authorities in Ottawa because of the havoc that the Government surveyors had created among the long, narrow, river-fronting farms of the early settlers near Edmonton. A mass indignation meeting was held in Prince Albert for the same reason. It is true that the Government was trying to correct its mistakes more or less as it went along, but it is not surprising that the settlers had no great confidence in an eventual reasonable outcome.

The whole question of land rights stirred again the old problem of half-breed rights, and most of this problem was inherited from the earlier troubles in Manitoba. During the seventies and even later, numbers of those who had been Riel's supporters in the Red River Valley had moved up into the Saskatchewan country. Some of these settlements were very recent. For instance, the settlement of Bresaylor, about twenty-five miles west of Battleford, was begun in 1883 and less than a year later had grown to about two hundred people. The settlers in such communities could not lay claim to ancient right within the specific area of the Territories, as the native half-breeds could, and as they themselves had claimed and justly so in the Red River Valley. Yet they did lay claim to land rights in a wider sense, and the Government came to admit the justice of their claim. Back of the claim, though a considerable way back, since they did have individual holdings that they were disturbed about, was the traditional Indian conception of land being held in trust, free to all and belonging to none.

But if the settlers had no great confidence in a reasonable outcome of the confusion, neither had the Indians. In fact, the Territories as a whole could have echoed what the *Herald* reports of Big Bear: "Big Bear has come to the conclusion that something is wrong in the management of Indian affairs. He has seen and conversed with many chief officers of the Department, but none of them seems to be 'the head.' There is always someone higher. To settle who this higher power is has now become the one object of his life."

This was in 1884, a year after Big Bear and his band had finally come under treaty, at which time Laurie had written with some complacency: "The present year will be noted as the one that saw the last of the nomadic tribes of the plains leave the haunts of their early days and begin life anew as tillers of the soil." But Big Bear had other ideas. True, he had been sent north, along with a number of other bands from the south, and he had been assigned a reserve in the Battleford area and a special agent to help him settle; but so far the agent had had little luck.

Big Bear was still insisting that it was the Government's duty and the Indians' right that his people should be provided for. On the other hand, the Government's erstwhile humane impulse to help the Indians to a new way of life had hardened to a "No work, no food" formula. The food was doled out daily by the farm instructor on each of the reserves. The situation was an unhappy one, and Laurie was concerned: "The local men are forced to abide by cast iron regulations. Then superior officials give concessions. The result is that the Indians are convinced that their local agents and instructors are liars, hard-hearted and unkind, and their usefulness is gone. Either the local men must be given more leeway, or they must be firmly backed up. This is a dangerous matter."

Certainly many of the Indians chafed under this humiliating policy. Poundmaker, who had worked hard and successfully with his people, was one of them. And after the arrival of the Indians from the south, he and Big Bear began to come closer in their views.

Mrs. Stobie's article will be continued in the Autumn issue of this magazine.

The town of Battleford, where the "Saskatchewan Herald" was published. Indians are shown looting it during the Northwest Rebellion.

NATURALISTS on the BACK RIVER

Part II

by R. J. Wilkie
and W. J. Breckenridge

Young arctic fox in summer pelage.
From a water colour by Dr. Breckenridge.

IN a stretch of 130 miles along the lower Back River, we encountered less than fifty Eskimos. These people were living in three widely separated locations. One of these below our camp was a relatively large settlement of ten families. The others above camp were one- and two-family groups. Their tribal name according to Sandy Lunan was "Oo-koo-shie-shil-ing-muit" translated as "people of the soap stone pots." The Danish ethnologist Kai Birket-Smith, in the report of the Fifth Thule Arctic Expedition, had recorded what obviously was the same spoken name as "Ut-ku-hing-hal-ings-muit" and translated simply as "people of the soapstone." This same authority has referred to the lower Back River Eskimos as having been the least altered from their primitive habits of living by the white culture of any of the Eskimo stock. This statement was made in 1924 but apparently little change has occurred during the intervening years. In spite of their primitive and precarious state, they eke out a seemingly happy existence along the Back River spearing fish in the summer and shooting caribou when they can during the rest of the year.

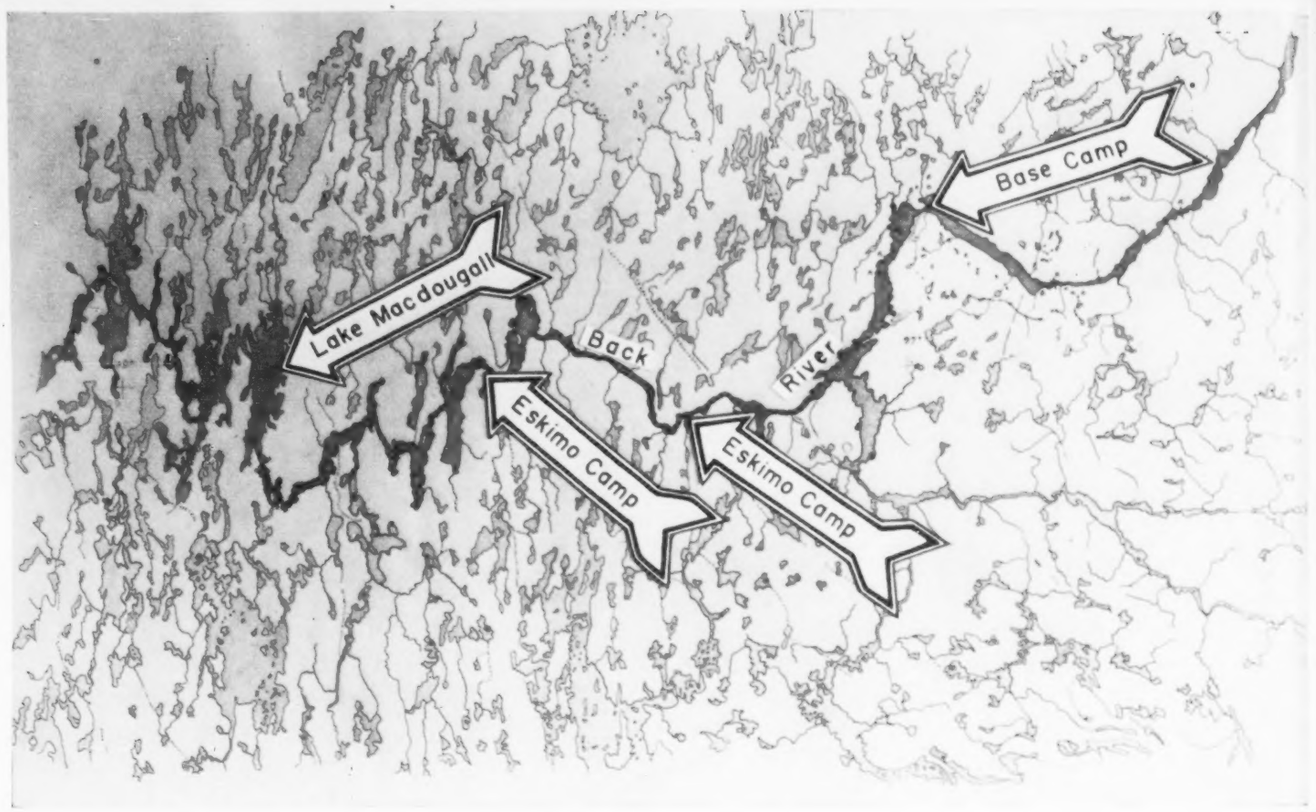
On a visit to the main Eskimo camp about thirty miles below our base, we were welcomed by a short, round-faced Eskimo named Ennikichik. According to Scott, the Mountie at Baker Lake, Ennikichik was a great caribou hunter. Although they had no chief, Ennikichik acted as their spokesman. These Eskimo families were loosely gathered together at these rapids because of the good fishing for lake trout and arctic char. After the fishing season, they disband in their search for caribou. Ennikichik recorded his flowery introduction of the different families on our tape recorder.

We knew practically no Eskimo words, but a small printed vocabulary was of some aid in our effort to converse with these people. It was immediately evident that our hosts knew no English whatsoever. Their obviously friendly curiosity set the stage for some very amusing exhibitions of sign language, picture drawing and exchanges of approving or dissenting gestures. Our most useful and nearly our only Eskimo word *shoo-nah*, which fortunately they recognized as a question "what is it?", "what do you call this?", was an excellent base word. Soon we were examining their *tuk-too* (caribou) *kamik* (boots) and *yep-pak* (parkas) and learned that Sandy Lunan, the Hudson's Bay Company factor at Baker Lake 150 miles to the southeast, was their corner store proprietor. From him their white canvas tents had been secured and, no doubt, the few other evidences of civilized living.

Most of their clothing and all of their footwear were of caribou skin tanned to a very pleasing buff color and kept in a good state of repair. Their primary articles of commerce are caribou skins and arctic fox pelts. These are traded at Baker Lake in winter when they are able to cover tremendous distances with their dog teams. Anga-shud-look, at fifty-four the old man of the tribe, traded us a white wolf pelt for two pocket knives, cigarettes, and several tins of tea and coffee. Anga-shud-look's diminutive wife gave us a letter which she had written in Eskimo syllabic characters, and by signs asked us to deliver it to Mr. Lunan at Baker Lake. We made many guesses as to its meaning. On our return trip Sandy's Eskimo housekeeper told us it reported several recent deaths in the village.

The women busily prepared steaming pots of tea which they offered in genuine appreciation of presents we had given them while the men brought out some freshly speared arctic char for us. This they called *ikh-a-look*. By means of sign language and a map drawn on the sand, we described the location of our camp and explained that we would leave a cache of food and equipment for them when we left.

Mr. Wilkie of the Wilkie Foundation and Dr. Breckenridge of the Minnesota Museum of Natural History continue their story of the Back River Expedition of 1953, begun in the Spring Beaver.



Shortly after the visit with the Eskimos, Charlie flew two of us to Lake Macdougall, some fifty miles west as the crow flies, for an eighty-five mile return trip by small boat. En route, from the plane, we got good aerial previews of some of the really awesome stretches of wild white water we would soon be navigating. We recalled Captain Back's names "Escape Rapids" and "Whirlpool Rapids"—none too reassuring names to us as we thought of our flimsy canvas boat lashed to the pontoons. Richard Taylor was busy on the flight checking locations of outcroppings of bedrocks within striking distances of the river. Here the directions of the glacial striae would yield important data in reconstructing the movements of the continental ice sheets that comparatively recently had melted from this scarred land. Double-checking the outline of the lake below us as beyond question that of Lake Macdougall we glided down onto a choppy bay which reflected ominous storm clouds. After launching our tiny craft and taking aboard the equipment, we watched the plane disappear into the eastern sky. As we started out, our little 3 h.p. "put-put," purred along reassuringly, although the clouds, now breaking, and again thickening, left us wondering what sort of weather the Fates were whipping up for us.

John Jarosz working on a glaucous gull.

After an hour a pair of high-domed rocky hills appeared ahead and one seemed to split the channel of the river. Soon the roar of troubled water told us it was time for us to plan our strategy for coping with our first rapids. This we found was Back's "Rock Rapids" of which he wrote, "We found it was not one falls, as the hollow roar had led us to believe, but a succession of falls and cascades, and whatever else is horrible in such confusion worse confounded." At the left of the rocky hills lay an ancient bed of the river where a tremendous volume of glacier-born water had cut through behind the 300-foot gneiss hill to join a similar torrent from the other side. All that remained of the ancient channel was a quiet, inviting embayment where we beached our boat for the night.

The next day's travel set the pattern of our navigation for the trip, since, although it was exhaustingly strenuous, we did make fair progress, and had no accidents. With a sturdier boat and under conditions where our lives did not so completely depend on our equipment, we would have attempted shooting more of the rapids than we did. And rapids we had—many of them—that could have furnished exciting sport. Tracking was a new experience for both of us, but we had anticipated the possibility, and out came our nylon ropes at the next not-too-turbulent white water. Then, hopping from boulder to boulder along the shore we soon gained some degree of confidence in jockeying the boat in and out of the racing channels with bow and stern lines. Usually we could keep up with the careen-

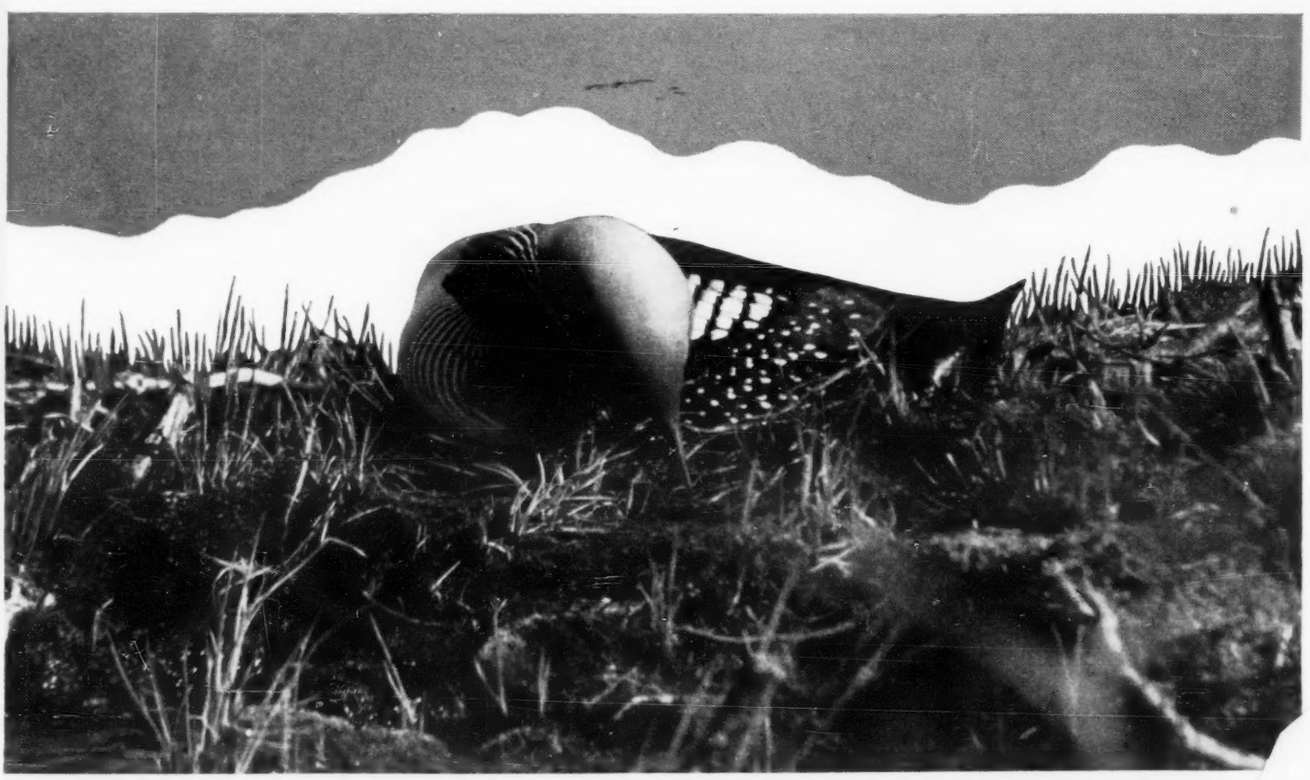
ing craft by running, jumping and scrambling over the rocks and in and out of the water. Frequently, however, the stern man had to call a halt in some quiet eddy while we caught our breath, detoured some difficult jumble of jagged rocks, or clambered out on a point of rock to shove the boat again into the current. In fact, by the time we passed our last rapids, we felt closely akin to that bird of the mountain torrents, the water ouzel.

Some distance below this point, Captain Back had honoured one of his most skilled boatmen, a half-breed named Sinclair, by designating one of the falls by his name. Sinclair Falls, which forced us into another $\frac{3}{4}$-mile portage, was a spectacular demonstration of the power of the tumultuous Back River thrown against the badly worn bed rock bulwarks which cross its channel at this point. The channel at high water must have been about one-half mile wide. Now it had shrunk to a mere 200 yards of wild pitching water, pounding incessantly against a jumble of huge house-sized boulders. We felt a bit battered ourselves after the three portage trips with our motor, gasoline, camping equipment, rock specimens, food, instruments and the already much patched canvas boat.

In the quiet waters below the falls we spotted a swimming loon. I grabbed my binoculars. Could this be that long-hoped-for arctic species, the yellow-billed loon? Its pattern appeared to be a counterpart of our common southern loon—but sure enough its pointed dagger bill was of shining ivory. None of the handbooks commonly used in temperate America even mention the species, since this is one of the few exclusively arctic birds. Evidently, it moves out onto the Pacific west of southern Alaska in winter and never is encountered by observers farther south. Another typical northerner, although not so rare, was the long-tailed jaeger, that dark-colored, predatory gull with the stiletto tail. A number were seen each day in this area cruising along the shore on slowly beating wings or alighting among the rocks where their white breasts were conspicuous. When a jaeger set out in pursuit of some hapless arctic tern or Baird's sandpiper, we got a remarkable demonstration of aerial agility; the pursuing jaeger would suddenly dive at the prey—certainly no mean aerialist itself—and follow it turn for turn till it fell victim or escaped perhaps by diving amongst the rocks.

Further downstream a golden plover on a meadowy shore invited investigation. The concerned retreat of the obviously nesting bird led me past a tiny tundra pond where a strange two-syllabled wailing call suddenly diverted my attention to a black-throated arctic loon sitting on a nest. Nests of such birds in temperate America are hidden effectively in tangled shore vegetation, but here the bird was exposed as though it were nesting on a close-cropped lawn. When approached within ten yards, the incubating bird slid off into the pond and swam excitedly back and forth between me and the nest puffing out its striking silver grey head and neck feathers as though the neck were inflated. Then it suddenly began yelping like a puppy in distress and dived repeatedly with as much splash as it could muster. Finally it flew off but soon returned with its mate. In the meantime, I examined the single big dark brown egg and wondered, it now being July 30, how much chance the still unhatched youngster would have of flying south before the freezeup.

Black-throated arctic loon on her nest. R. T. Congdon.



Captain Back mentioned being puzzled by a "row of piled stones and slabs, placed a few feet apart, which . . . were at first mistaken for figures gazing upon us . . . for what purpose this 'picquet' mounted guard at the foot of the rapids, was not . . . clear to our comprehension." These also puzzled us, but it was our good fortune to meet an Eskimo family encamped at a rapids lower down where we found what we considered the probable answer to this riddle.

Late in the afternoon of our third day when we climbed a rocky hill to lay out our course through some especially boisterous whitewater ahead, we spotted two objects that looked like tents perched high above the roughest part of the rapids far downstream. We had been fooled by huge boulders looking like tents or houses before, but binoculars proved these were really tents. We hurried expectantly through the mile of tracking between us and the village. If our previous information were correct and no white men had ventured on these waters in the last hundred years, we would certainly surprise them. So we approached with much doubt as to our reception. If they were astonished by our arrival, they were most successful in concealing it. Some slight excitement was evinced by the two women and the five children, but the two men simply left their work which appeared to have been cleaning fish for drying and walked slowly to meet us. We approached smiling and waving our open hands to assure them of our friendly intentions, and were received with smiles in return.

We were at once amazed by the simplicity of their living. Obviously their major, and as far as we could determine, their only food was fish. In securing this they used the Eskimo fish spear, with wooden shaft. Judging from the long line of drying fish on the thongs nearby, they knew how to use it. At a distance the bright red color of the drying arctic char made us mistake them for strips of red flannel. And here in the supports for the fish-drying lines were the rows of piled stones that solved the puzzle of the little men watching us from the river banks. Some may also have been placed to simulate men, to direct the course taken by caribou during the hunts.

Baird's sandpiper, two days old. From a water colour by W. J. Breckenridge.

For Jim and Bob Wilkie and Dr. Lou Larson the expedition came to a story-book climax. They took off to fly back to Churchill on the 28th of July, and Bob here gives a first-hand account of the experience:

An hour out of Baker Lake at 12:30 a.m. and still 300 miles north of Churchill, Charlie Weber, our tundra pilot, pointed below us to Kaminuriak Lake, 60 miles long. The plane, droning its way over this monotonous stretch of water, soon had us all dozing, when suddenly we awakened

Golden plover. R. T. Congdon

to the sickening sound of the motor sputtering to a stop! Flames shot out of the engine cowling. Charlie pulled on the fire extinguisher and the flames were quenched, but the cabin filled with black smoke and oil splashed over the windshield, completely blacking out our vision. Charlie kept his eyes glued to the altimeter as he took the plane into a dive and a sideslip. Using the altimeter reading set at Baker Lake to judge his landing height, he leveled out, blindly hoping we were still over the lake. We mushed hard into the water in a tail down position, then, bouncing clear of the water, we struck what we later found was the last projecting rock on the tip of a long reef. A few feet further out from the reef and we would have been safe.

The blow doubled up the right pontoon at a 90° angle. A pontoon strut stabbed through the cabin between Jim's legs, providentially ending up in a packsack. The plane slithered and skidded in the water and slowed to a stop. Everyone scrambled up on the motor cowling. No one seemed badly hurt, while minor bruises and bumps seemed insignificant under these circumstances. With the tail

Gambel's sparrow W.J.B.

settling steadily in the water it appeared certain that the plane would eventually sink, so we hauled out our air mattresses and blew them up. Charlie got out an old Mae West but this would be almost useless in the icy 34° water. We were more than a half mile off shore and realized there was no chance whatsoever of swimming that distance. Evidently our time had not come, however, for the ship finally reached an equilibrium and a slight wind and possibly a current in the lake started it drifting at a rate of about two miles per hour.

Unluckily, we drifted considerably off shore of several reefs, although it appeared with each that we might approach near enough to attempt swimming. Soon the tail settled to an almost vertical position and the wing surfaces made a fair sail. We debated the possibility of going ashore on our air mattresses but since there were only three floats for five people, (young Mrs. Weber had come along for the thrill!) we didn't think all of us could make it. Our decision was to stick with the ship. For eight miserable hours, we sat on the wings ready to jump at any minute if the plane should slide into the water. Finally, some distance out from what seemed to be the last reef, soundings indicated that we had a good chance of grounding. A few minutes later the tail and one pontoon scraped on the bottom in ten feet of water and we came to a halt—but still we were a quarter-mile from shore.

Charlie seemed to thaw out first and started looking the plane over for materials to build a raft. The only tools we had, since there was no salvage equipment on the plane, were a couple of light hand axes and a Boy Scout knife with a screwdriver blade. One axe went overboard, but we managed to hang onto the second and with it chopped out one of the gas tanks. We removed the wooden plane doors and took off all the metal parts. Using our tent ropes, we lashed the door frames under the 50-gallon tank in order to stabilize it. One man, we found, could float on the tank in a prone position. After lashing on the doors, it supported two of us.

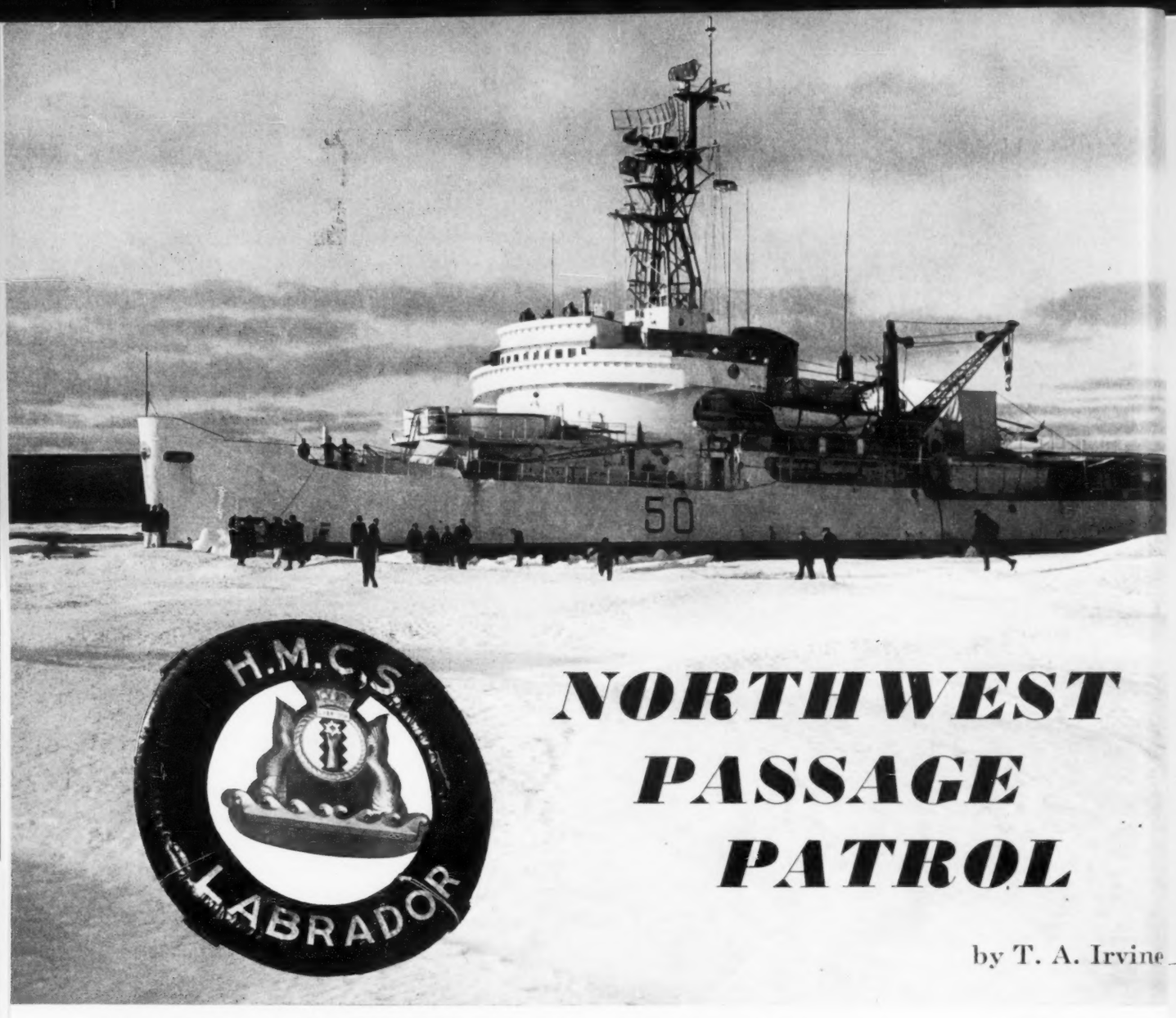
Strips of arctic char drying on lines supported by pillars of stone. L. A. Learmonth

Then we got the idea of lashing our air mattresses around the outside edge of the tank. This made a very stable raft. In some rubberized sacks, we placed sleeping bags and some canned food. These were blown up like paper sacks and tied to the raft. The rest of our equipment was under water down in the tail of the plane and we were afraid to try and salvage any more. By this time, a strong wind was blowing and we decided it was now or never.

Gingerly, each of us crawled onto the raft and found a place on top of the tank. We paid ourselves out on the anchor rope and when we found that we were still afloat, we let go and the wind and waves took us in their arms. For awhile, it looked as though we would miss the long point and float out into the main part of the lake. It wasn't until we were within a hundred yards of shore that we were sure we would gain the tip of the reef. Icy waves were breaking over the raft but after thirteen hours afloat we were now so jubilant that such incidentals no longer disturbed us.

Our jubilance, however, gradually calmed down and disappeared during the next three miserable days spent trying to get something to eat, fighting mosquitoes and hoping for a plane to pass over. The meagre amount of food we had salvaged consisted of twelve tins of canned meat, twenty packets of dehydrated soup and some chocolate. Anticipating that we might be marooned for as much as twelve days, we rationed ourselves to one can of meat and two packets of soup per day. We tried to sleep as much as possible to conserve our strength; the rest of the time we spent gathering heather for signal fires and for cooking. Jim and Charlie constructed a slingshot using rubber from the Mae West and wood from a specimen box. They were successful in getting a few ptarmigan and some small birds. These helped thicken the soup immeasurably. None of the arctic berries were ripe. Although there was a plentiful supply of mushrooms we were afraid to try them. So we got along as best we could on our soup and canned meat supplemented with a small supply of pilot biscuits which had floated ashore.

All of the specimens in the plane were lost but on the second day we discovered a large shiny aluminum specimen box lying on the shore. This made a perfect mirror if we should have a chance to "shine" a rescue plane. On the third day while making fish hooks out of the keys from the meat tins, we heard a faint drone and spotted a tiny plane passing south several miles to the west of us. Charlie and I grabbed the aluminum box and cover and started flashing the plane while Jim and Lou started up the signal fires. Only a few flashes of the reflectors were needed to alert the pilot and he swung around and glided to a stop in the bay in front of us. And a couple of hours later, we landed in Churchill. ◆



NORTHWEST PASSAGE PATROL

by T. A. Irvine

H.M.C.S. "Labrador" in the ice of Prince of Wales Strait, August 1954. All R.C.N. photos.

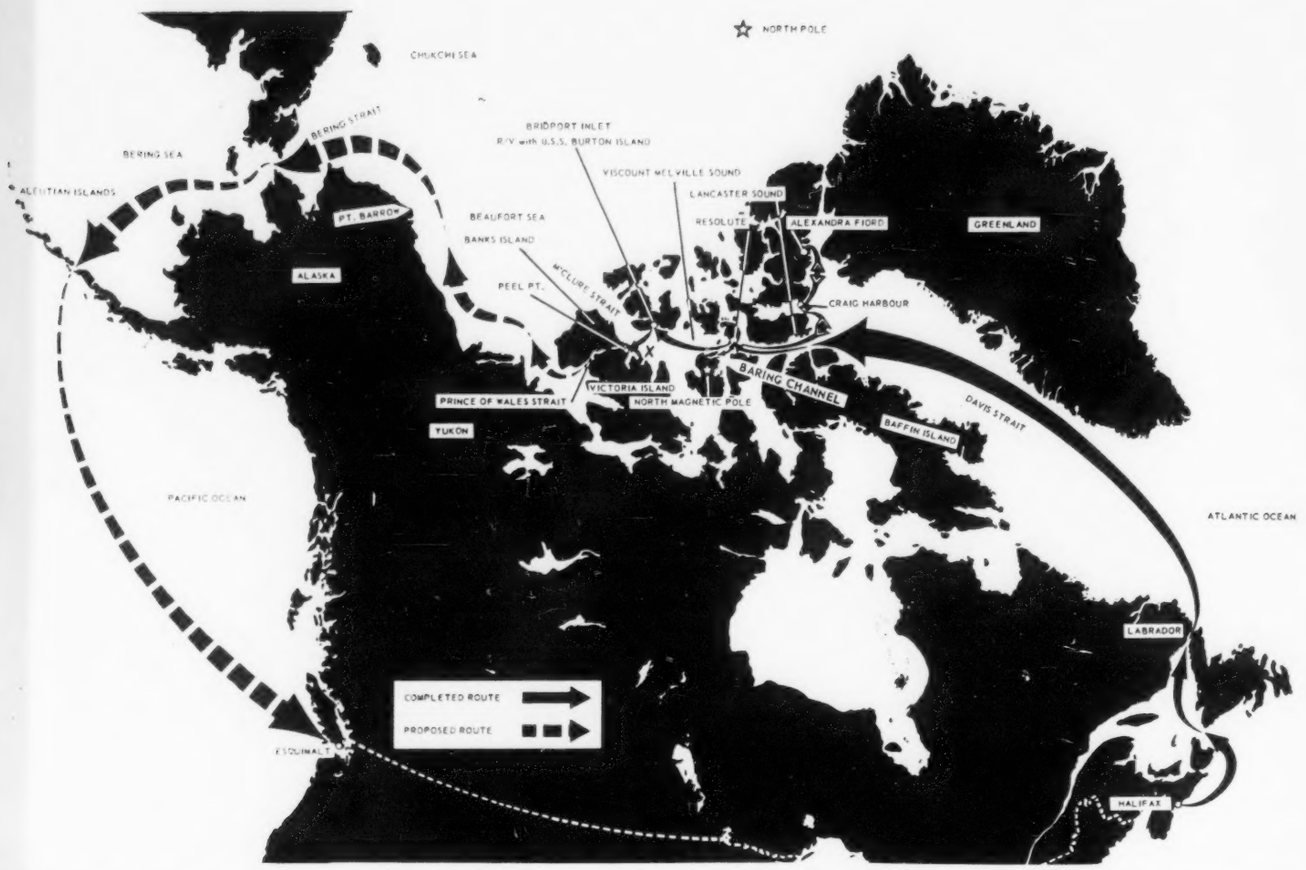
AT three p.m. on July 29th, 1954, H.M.C.S. *Labrador*, the Royal Canadian Navy's new Arctic patrol vessel was in the Davis Strait between Greenland and Baffin Island ploughing steadily north. A few minutes later the officer of the watch in the icebreaker's command position reported the presence of pack ice ahead of the ship to the captain—Captain O. C. S. Robertson, G.M., R.D., R.C.N. It was loose pack, four feet thick and *Labrador* had no difficulty in forcing a passage through it.

H.M.C.S. *Labrador* had entered her element, and for the next sixty days the icy face of the Arctic would become an everyday sight for her twenty officers, twelve scientists and two-hundred-odd men. A scant three weeks previously, on July 8 the 6,400-ton ship had been commissioned at Sorel, P.Q. She had arrived in Halifax on July 14 and after a busy nine days embarking stores, scientific equipment and scientific personnel had sailed on the 23rd bound for Resolute Bay, N.W.T.

After a new ship is accepted into the Navy, it is standard practice to set aside three weeks for a "working up" programme. This period gives the ship's company a chance to familiarise themselves with new equipment, the opportunity is taken to carry out exhaustive engine trials, and generally the time is spent in smoothing out troubles inherent in the initial organisation and running of a new ship. *Labrador* had no such opportunity, and by necessity passed to the "operational" category immediately. It was imperative that the ship should reach the Arctic as soon as possible to carry out her many commitments in the scientific field. An added burden was thrown on the electrical and engineering departments by the fact that the propulsion system in *Labrador* was entirely novel to a basically steam-engined Navy. Six diesel generators of 2,000 h.p. each, drive two electric motors which in turn power twin propellers. In the supply department the problem of providing sufficient food and all the necessary spare parts for the complicated machinery and electrical equipment was immense. There are no supply ports in the Arctic.

During the run up Davis Strait in poor visibility, *Labrador* threaded her way past hundreds of drifting icebergs

Lieut. Irvine was hydrographic officer on Labrador's *maiden voyage. A Scotsman, he has served eleven years in the R.N. and R.C.N.*



This map was prepared when the ship was in Prince of Wales Strait. From Esquimalt she completed her circumnavigation of North America via the Panama Canal.

and her captain rarely left the bridge, while down below in engine and motor rooms personnel anxiously watched dials, checked ceaselessly for any sign of trouble in the steady roar of the diesels and learned about their new ship. The first month was a trying and a tiring time for all hands.

The scientific team led by Doctor D. C. Rose of the National Research Council had begun the scientific programme as soon as the ship left Halifax. Dr. Rose's work lay in the propagation of cosmic rays, and his equipment complete with flashing tubes was promptly labelled the "Christmas Tree" by the ship's company. Continuous soundings were being taken by the hydrographers for the Canadian Hydrographic Service and the physical properties of sea water were being examined by the oceanographers. The weather was receiving attention from the meteorological office and Commander E. M. Penton, R.N. (Ret'd.) from the Admiralty Compass Observatory, England, was to be seen on the pilotage position with a pocketful of magnets coaxing his gyro-magnetic compass into action.

"Labrador's" medical officer, Surgeon-Lt. Derek Kidd, with Ariak's wife and baby in the sick bay.

The icebreaker reached Resolute Bay on Cornwallis Island, 2,400 miles from Halifax, on July 31—a fast passage helped by good ice conditions in Lancaster Sound. Two hydrographers were landed to carry out the triangulation of Resolute Bay preparatory to re-charting and sounding the area with the ship's boats. A naval party assisted them in their work. *Labrador* carries a specially equipped sounding launch fitted with radar, echo sounder and gyro compass as well as two standard naval motor cutters fitted with echo sounders. The ship headed east again through Lancaster Sound and remained in this area until August 4 carrying out hydrography, oceanography and magnetic observations. The helicopters were in constant use transporting Mr. Loomer of the Dominion Observatory to suitable locations ashore for magnetic observations. A series of oceanographic readings were required at Navy Board Inlet on the north coast of Baffin Island, and while entering the inlet at a moderate speed, the bottom suddenly came up without warning from a depth of seventeen

With water streaming from his sides a polar bear hoists himself onto an ice floe near the ship.

hundred feet to eighty feet in two minutes. The Arctic Archipelago is poorly charted and this served as a hair raising reminder. What the officer of the watch said on this occasion is better left unrecorded.

On August 5, a call was made at Craig Harbour, Ellesmere Island, to embark an Eskimo special constable of the R.C.M.P. and his family for passage to Alexandra Fiord. Ariak and family were installed in special quarters on board and the Eskimo's seventeen huskies were pegged out in two lines on *Labrador's* foc'sle. As the ship worked herself clear of the ice at the entrance to Craig Harbour, the bridge personnel were regaled with a chorus of blood curdling howls as the huskies settled down for the trip. While navigating Glacier Strait between Ellesmere and Coburg Island it was noted with some concern that the pencilled course line on the chart took the ship across Coburg Island while the island was plainly three miles to the southeast. Without complicating the story further it was established that *Labrador* was in clear water and that the island was wrongly charted! Heavy ice up to ten feet thick in Smith Sound slowed down progress to the north, but by backing and ramming and taking advantage of leads, Alexandra Fiord was reached on August 8. The ship was hove to in the ice some three miles from the farthest north R.C.M.P. post. The Eskimo family and dogs were disembarked and a start was made in unloading the stores for the post. Complete stores for Alexandra Fiord for a year had been loaded in Halifax. The ships two landing craft were soon running a shuttle service to the beach but the operation was necessarily slow owing to the drifting ice clogging the fiord and beaching area. A brief reconnaissance survey had revealed numerous rock pinnacles rising to within a few feet of the surface between *Labrador* and the beach so it was obviously imprudent to take the ship closer in. The final fifteen tons of coal for the post were transported on a competitive basis in record time. One landing craft was manned by twelve of *Labrador's* officers and the other by twelve Chief and Petty officers. At a given signal both boats set off for the beach at top speed. The Chief and Petty officers unloaded their seven and a half tons in fifteen minutes—the officers managed to get their ashore thirty seconds later. To commemorate this first meet of the "Labrador Jockey Club" a tin mug and plate suitably inscribed were presented by the Captain to the Chief and Petty officers' crew. During the ship's stay at Alexandra Fiord, the met. office reported the highest temperature of the voyage north of the Arctic Circle at 56°F. This point was also the ship's farthest north of the trip—79°N, some six hundred and fifty miles from the pole.

By August 16 the ship was back at Resolute Bay ready to begin sounding the area with her boats now that the triangulation was completed. The shore party who had been accommodated by the R.C.A.F. were re-embarked and the boats were hoisted out. On completion of the hydrographic work, course was set for Somerset Island to land a magnetic party. About this time, the Boston dragger *Monte Carlo* was reported to be in an icebound position inside the Baring Channel between Russell and Prince of Wales Islands. This was a private expedition and had as its object the location of the ever-shifting magnetic pole and the collection of flora and fauna for the American Museum of Natural History. After establishing contact with the *Monte Carlo* by helicopter and seeing that assistance was necessary to extricate her from the ice, *Labrador* cautiously proceeded thirty miles up the uncharted Baring Channel.

Capt. Robertson (left) conferring with W. J. Dowd of New York, owner-skipper of the Boston dragger "Monte Carlo," just before the icebreaker took her in tow.

A rough chart of the channel was drawn as the ship forced through the ice. This was no work of art but it helped to get both ships out again. By midnight on August 21 *Labrador* reached *Monte Carlo*, a tow rope was passed between the two ships and the tow out began. Fifteen miles had been covered by noon the following day, the ice conditions had improved and the tow was cast off—*Monte Carlo* following in the channel cut by the icebreaker. Clear water was eventually reached in Lancaster Sound, *Monte Carlo* was replenished with fuel and stores and proceeded on her way east back to Boston—considerably wiser about the Arctic.

Since leaving Halifax there had been little time for relaxation but as many opportunities as possible had been made for the ship's company to get ashore and at least stretch their legs. A visit had been made to Erebus Bay while in the Lancaster Sound area. This spot is of great historical interest being the site of Sir John Franklin's last wintering headquarters in 1845-46, and a subsequent refuge harbour for the many searching expeditions which followed (*Beaver* Spring 1955, p. 48). Franklin would indeed have been astonished to see how comfortable Arctic exploration by sea had become in a modern naval icebreaker. In their turn, *Labrador's* crew pondered on the incredible feats of Franklin and the others of a bygone age who had sailed in these waters. The amenities in *Labrador* were a far cry from the miserable conditions existing in arctic ships a hundred years ago. The modern "explorer" in *Labrador* even had a newspaper to keep him in touch with the outside world. *Bergy Bits*—written, edited, published and distributed by the ship's padre—first appeared two days out from Halifax and contained international news by courtesy of the radio office, local news by contribution from the ship's company, and spurious cartoons which proved that the Canadian sailor's sense of humour can cope with any situation. The padre's "paper rounds" were eagerly awaited each evening.

On August 23, Captain Robertson informed his crew that *Labrador* would proceed to the west to meet the joint Canadian-U.S. Beaufort Sea Expedition. This consisted of the American icebreakers U.S.C.G.S. *Northwind* and U.S.S. *Burton Island*, operating in the western Arctic, and it was decided to rendez-vous with the *Burton Island* at Dealy Island. Heavy ice eight to ten feet thick was en-

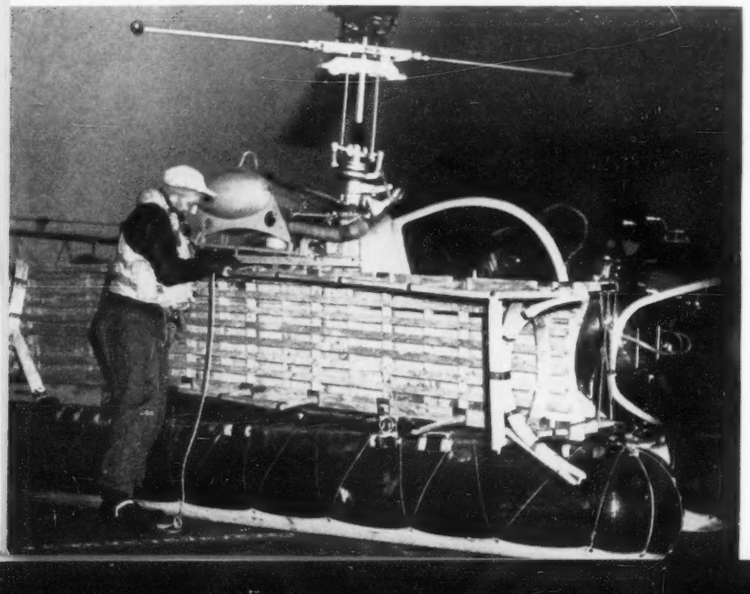
Similarity of design can be seen in this picture of H.M.C.S. "Labrador" and U.S.C.G.S. "Eastwind" secured together in Alexandra Fiord.

countered in Barrow Strait and Viscount Melville Sound during this passage and on August 25, *Labrador* met *Burton Island*. A mess dinner was held on board *Labrador* with guests from the *Burton Island* to celebrate the occasion and also to co-ordinate the scientific programmes of both expeditions. The following day both ships headed slowly across Viscount Melville Sound where the heaviest ice of the trip was experienced. It took almost three days to steam one hundred and twenty miles through polar ice under pressure.

There are many theories as to the most successful method of breaking ice in such a ship as *Labrador*. It is not within the scope of this article to investigate the problem, but for those engaged in it successful ice breaking requires a somewhat different mental outlook to that employed in the conventional naval vessel. Normally, it is very distressing for a naval officer to hit anything with his ship. In *Labrador*, however, the officer of the watch spends many hours hitting ice and this with the Captain's approval. He may even be admonished for not hitting it hard enough! At the back of his mind is the thought that a chunk of hard polar ice can easily smash a propeller. There are no dry-docking facilities in the Arctic and it can be a long winter.

After contacting the other American icebreaker, *Northwind*, off Victoria Island, all three ships smashed into Prince of Wales Strait. While in this area one of *Labrador's* helicopters—the "jack of all trades" in the Arctic—located a cache at Knight Harbour on Banks Island left by Vilhjalmur Stefansson in 1916. A sledge, compass and small anchor were recovered and flown back to the ship. These relics have since been presented to the National Museum. A cache of food originally left by Captain Kellett in 1852 had previously been noted at Dealy Island. Some of the food had been supplied to H.M.S. *Resolute* at this time by the well known English company, Fortnum and Mason, and some of it was still edible. On August 30, the ship received an air drop from an R.C.A.F. Lancaster and all hands anxiously watched the mail containers "bale out" and parachute to the beach to be retrieved by the ubiquitous helicopters. The R.C.A.F. could do no wrong as far as *Labrador* was concerned after this display of air-sea co-operation.

Vilhjalmur Stefansson's sled, left at Knight Harbour on Banks Island in 1916, is taken aboard lashed to a helicopter.



Extensive hydrographic operations were carried out in Prince of Wales Strait utilising the helicopters to transport equipment and personnel to observation sites. Even the pilots were amazed at what the helicopter could carry! On September 6, the ship put into De Salis Bay on the south-east coast of Banks Island to test electronic equipment, and the opportunity was also taken to try out arctic survival gear using standard survival rations. Time did not permit an exhaustive trial and the two Chief Petty officers who camped out returned to the ship looking healthier than when they left—to the disappointment of many of the crew. One of *Labrador's* landing craft had the misfortune to be swamped and swept up on the beach on a very black night. The crew got off with nothing more than a soaking in the icy water and were flown back to the ship where the medical officer was prepared for the worst. The incident closed with the doctor drinking the tea he had brewed for the patients and with the salvage of the landing craft the following day.

After leaving De Salis Bay, *Labrador* again contacted the American ships off Cape Kellett and the three ships proceeded westward along the North Canadian and Alaskan coasts. Scientists are gluttons for work and the programme continued unabated. A final trip was made up into the polar ice pack north of Point Barrow, the scientists were finally satisfied, and *Labrador* set course for the southward. Just before the ship broke out of the ice for the last time an astonishing sight greeted her crew. Over a hundred walrus were grouped on a single ice floe ahead of the ship. The majority of the sailors had become quite blasé about such sights as polar bears, walrus and seals but a hundred walrus was something new, and *Labrador's* bridge and foc'sle were crowded with "goofers" armed with cameras.*

The ship recrossed the Arctic Circle on September 21 in the Bering Strait and after a stormy passage reached Esquimalt, B.C., six days later. Over ten thousand miles had been logged in this maiden voyage which had lasted for sixty-eight days. The Northwest Passage had been navigated for the first time by a naval vessel, an excellent start had been made in scientific discovery in the Arctic in a Canadian vessel specially designed and equipped for the task, and for the first time the Navy had operated in a completely new field for an extended period.

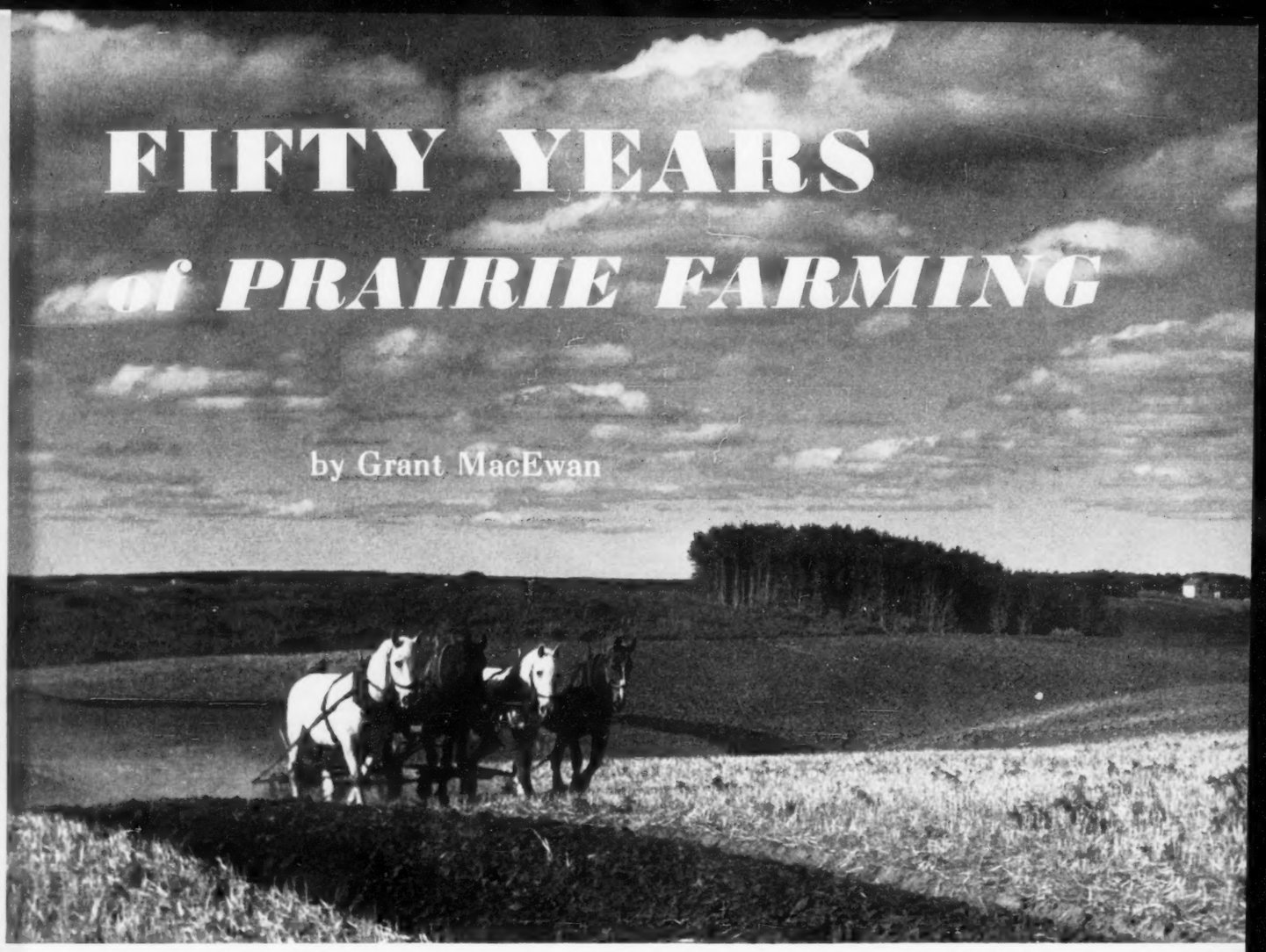
Three days before *Labrador* sailed from Halifax, the famous R.C.M.P. ship *St. Roch* had left the same port bound for Esquimalt and Vancouver via the Panama Canal. A week after *Labrador* arrived in Esquimalt, the eighty-ton *St. Roch* secured alongside the icebreaker—completely dwarfed by her massive hull. It was hard to believe that this small low-powered wooden-hulled ship had successfully navigated the Northwest Passage both ways—first in 1940-42 and again in 1944.

Labrador returned to Halifax on November 22 after circumnavigating the North American continent with calls at San Francisco, Panama, and St. Georges (Grenada). And she wintered in Halifax preparing for her next trip to the Arctic.

*A "goofer" can be compared to a "sidewalk superintendent."

FIFTY YEARS of PRAIRIE FARMING

by Grant MacEwan



A four-horse plough on the rolling prairie. Nicholas Morant for C.P.R.

AS the Provinces of Saskatchewan and Alberta celebrate their Fiftieth Anniversary in 1955, it may be discovered that agriculture holds the best of the jubilee stories.

The rapid transformation of Western Canada's agricultural face was without parallel. It was not a case of unbroken progress, however, because the new West witnessed reverses and disasters of nearly every kind short of earthquakes—devastating years of drought, crippling prices for farm products, failing markets, crop losses due to rust and other plant enemies, animal disorders like mange and foot-and-mouth disease, and severe winters such as that of 1906-07 when nearly fifty percent of the cattle in the range country perished.

Lots of times the cynics could see nothing but failure in the agricultural outlook, and in the drought-stricken '30s the wiseacres said "the climate is changing; farming in these parts is doomed." But the farming country of the new West possessed an unrecognized degree of resilience, and time after time it demonstrated its ability to "bounce back" and soar to new heights of production.

As the North West Territories yielded the two new provinces in that year of 1905, the youthful Western Canada was only 29 years removed from a shipment of 857 bushels and ten pounds of wheat that was sacked and loaded on a river boat at the foot of Winnipeg's Lombard Street, the first wheat to be sent from the area. It was just 27 years away from the arrival of the first railway train to furnish communication better than that supplied by riverboat, canoe and the squealing Red River cart.

But agriculture was beginning to move ahead at a greatly accelerated pace, and a flood of newcomers faced the expanses of unoccupied soil with youthful confidence. In the country between Red River and the western boundary of the new Province of Alberta, a crop of 84 million bushels of wheat, the biggest in its short history, was harvested in that fall of 1905. Wheat was selling for 62 cents a bushel in most sections of the West; fat steers commanded up to $3\frac{1}{2}$ cents a pound; pigs might bring $5\frac{1}{2}$ cents a pound and lambs, 5 cents. By modern standards, the pigs marketed were ill bred and poorly shaped and the steers were huge and often very fat.

There had been stallion shows and cattle sales at several western points, but Regina added to the significance of the year 1905 by holding the first western winter fair. Big joints of beef and big steers being still in fashion, it was not surprising that the champion bullock at Regina on that occasion was said to be about as big as Baron's Gem, the grand champion Clydesdale stallion. And at Brandon

Mr. MacEwan, formerly Dean of Agriculture at the University of Manitoba, is now western manager of the Council of Canadian Beef Producers, in Calgary.

Exhibition, a giant eastern-bred steer called Fergus, weighing 2450 pounds as a three-year-old, was displayed as a "model" for all enterprising cattlemen to see.

At Calgary's fifth annual bull sale, that year, the average price for pure bred cattle was $69.59, a strikingly small figure compared with the average of $1120 obtained at the corresponding event just 46 years later. And in June of the year in which the two provinces were created, the first Matador Ranch cattle, wearing the "Flying U" brand, arrived to occupy the grass along the Saskatchewan River, north of Swift Current. It was, indeed, a year of decision for agriculture as well as for government.

But the most exciting feature about the provincial birth-year was the mad rush for homestead farms. Anybody who was 21 years of age or the head of a family and could make a payment of $10 could get a homestead, and the stampede bore some resemblance to a gold-rush. In a space of 13 years, some 400,000 homesteads were filed on in these three mid-western provinces. But mistakes were made, lots of them, especially in the settlement of land that was unsuited to cultivation.

When the area was known as Rupert's Land, people spoke of it as "fur country." In 1905 and for some years thereafter, they called it "wheat country" and that's about what it was. Wheat loved the new western soil and the settlers found it easy to love wheat. Acreage expanded and when weather co-operated, production soared. But wheat growing was attended by hazards, one of the principal being those early frosts that struck before the crop was mature. Settlers were just about powerless in preventing frost damage, and an obvious need was for an early variety possessing the same fine milling and baking qualities that carried the prairie-grown Red Fife to fame. Science's first major contribution to western agriculture was the breeding of Marquis wheat, first distributed to western farmers in 1909.

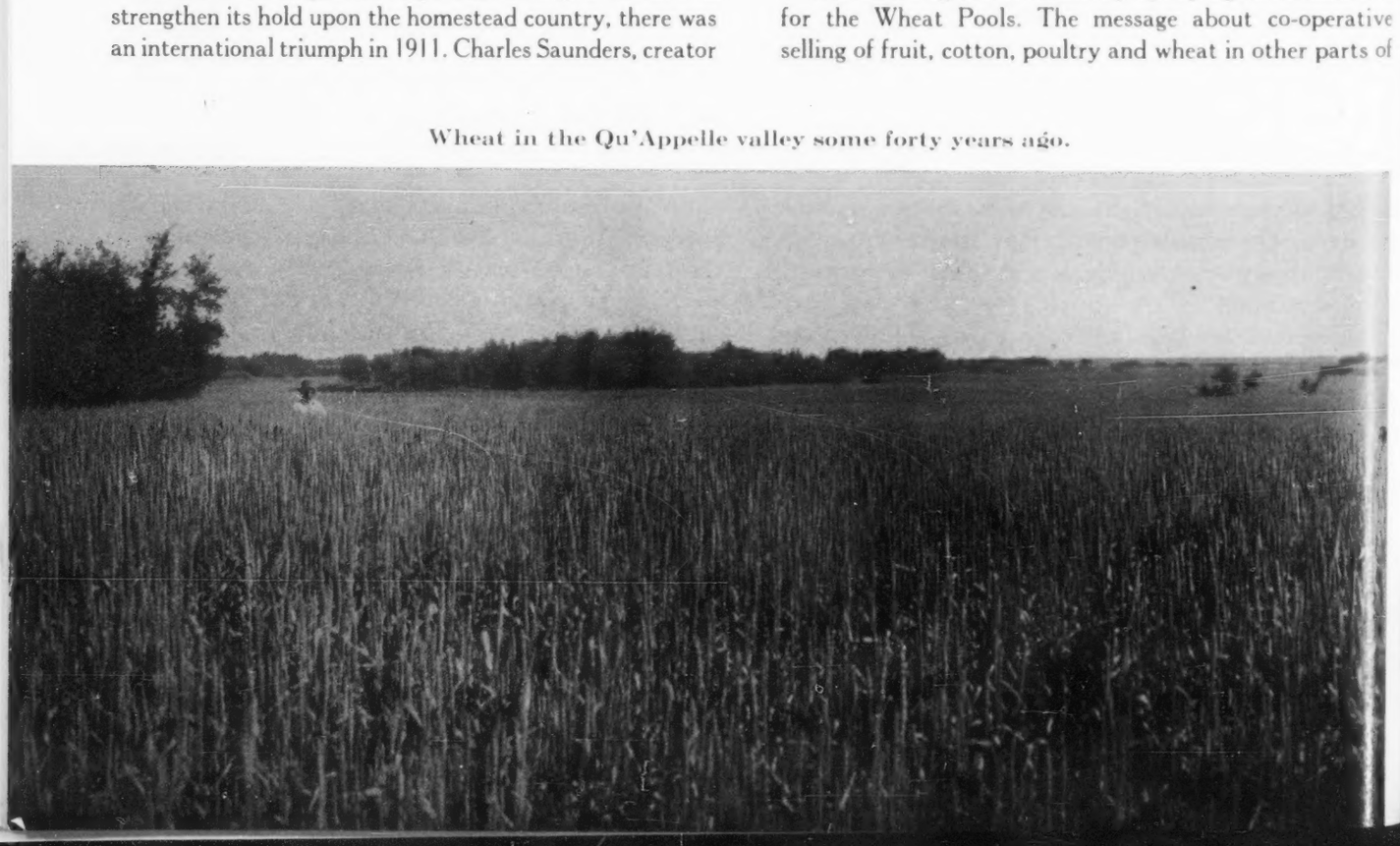
To enhance the general respect for Marquis wheat and strengthen its hold upon the homestead country, there was an international triumph in 1911. Charles Saunders, creator of Marquis sent a five-pound sample to a pint-sized homesteader at Rosthern—Seager Wheeler by name. That young farmer possessed special skill in growing things, and in that fall his entry of wheat won the provincial seed fair honours. Moreoever, when sent to the New York Land Show, it qualified for the thousand dollars in gold offered by the C.P.R. for the best red spring wheat grown anywhere in the world. Here was new proof that wheat produced on Western Canada's comparatively dry soils was unsurpassed for quality.

Wheat was paying for more than groceries; it was paying for railroads and it had become the very life-blood of the west country's economy. If more were required to create an almost dangerous faith in the economic completeness of wheat, the wartime demand, coupled with the big crop of 1915, provided it. Across the three mid-western provinces, the average yield in that year was almost 26 bushels per acre, and for the first time total wheat production rose above 350 million bushels. The "big crop" was not without unfortunate results, however; enthusiastic settlers extended their furrows to spoil a lot of good grass growing on land that could never be better than submarginal for wheat.

The next few years witnessed the birth of the Wheat Board principle in marketing. Wheat prices were soaring; in May of 1917, Winnipeg wheat touched $3.00 per bushel and in the next month the Canadian government set up the Board of Grain Supervisors with wide, monopolistic powers in regulating prices. The board did not continue for long, but it was followed in 1919 by the first Wheat Board and a new and popular pattern in wheat marketing began to be formed.

Through the years, wheat growers faced two main problems, one in producing crops in a climate sometimes unco-operative, and the other in selling it at prices that seemed fair and just. When the farmers lost the Wheat Board set-up in 1919 they grew increasingly impatient, and in 1923 made agricultural history by laying the foundation for the Wheat Pools. The message about co-operative selling of fruit, cotton, poultry and wheat in other parts of

Wheat in the Qu'Appelle valley some forty years ago.



Breaking prairie sod with a twelve-bottom plough drawn by a heavy steam engine. Cockshutt Plow Co.

the continent, as brought by Aaron Sapiro, inspired the western farmers to do things for themselves and led to action.

It was late in the season, but in less than 90 days Alberta organized a pool that handled 35 million bushels of wheat from the 1923 crop. Saskatchewan started a sign-up campaign but decided against operations until the following year when 50 percent of the provincial wheat acreage was included in the pool. All three mid-western provinces had energetic wheat pools in 1924. The co-operators were enthusiastic but the pools of that period did not escape troubles, especially in 1929 when wheat values dropped and the large initial payments made on deliveries to the pools resulted in huge debts and some embarrassment to those co-operative organizations. The Pools had a bad time for a few years, but under somewhat changed policies they paid their debts and triumphed again to become one of the powerful forces in western agriculture.

Wheat seemed to be in the news almost constantly through the 50 years under review. If wheat prices weren't down, they were up, and if it wasn't a good season for wheat, it was a bad one. Wheat never seemed to invite averages and for much of the decade following 1929, wheat was in the doldrums. Of course wheat was not alone in its misery in the memorable '30s.

Depression and low prices which were world-wide would have been bad enough, but when the West's most severe period of drought was superimposed upon those other troubles, western farmers experienced their worst years in the half century. Prices for fat steers dropped to three cents a pound, market pigs to two and one-half cents a pound, barley to five and one-half cents a bushel at some country

Stack threshing in the early days of the steamers. Mrs. H. G. Wade

points; and on December 16, 1932, Fort William wheat touched 39⅜ cents a bushel. The MacEwan wheat crop of that fall netted just under 28 cents a bushel, which didn't offer much for the payment of taxes and mortgage interest. Such discouraging conditions made the success of the World Grain Show held at Regina in the following year all the more remarkable. The West was down but not out, and the historic Grain Show carried through by people who had a lot of typical western nerve, served to direct international attention to Canada's soil.

Yields, in that period, had dropped as dramatically as prices to place western farmers in the most unhappy position possible. There was a series of dry years, but 1937 was the "year of years" with Saskatchewan's wheat average dropping to an unprecedented two and one-half bushels per acre. The Canadian Wheat Board became a buying agency instead of a selling agency and calls went out for relief. Feed shortages made it necessary to liquidate much of the country's livestock, and in some districts the only feed recovered in that terrible year was Russian thistles which found drought to their liking. Unpalatable and repulsive as the so-called "hay" from Russian thistles was, it furnished filler and served to bring many cattle, horses and sheep through the grimmest winter in the history of the farming country.

Pessimism reached a peak in many quarters and gloom hung like a heavy fog over farming areas. Even some editorial writers suggested that the climate was changing and that productive years might never come again. One writer went to the length of proposing a return of buffalo to graze where attempts had been made to farm inside the Palliser Triangle.* And those who had been sitting in judgment in the East and overseas, said: "We told you so; settlers out there in Western Canada have been mining their good soils and depletion is now complete. They'll never experience good crops again."

Some farmers did give up to adopt urban life or farm elsewhere. But there was a stubborn element that refused to quit and once again the crop country came back with more "bounce" than anyone would have thought possible. Moisture conditions became more favourable and the world needed and wanted Canada's wheat. The debts incurred in the '30s were liquidated in the '40s and agriculture became a prosperous industry. And to rebuke the "wise" folk who said the western soil was exhausted and ruined, nature co-operated to make the most striking demonstration of productivity in these most recent years. The 529 million bushels of wheat produced in the three mid-western provinces in 1951 was the biggest crop in the country's history. The cynics said it was an accident; "it can't happen again." But in 1952, the crop totalled 664 million bushels to establish a new record. Nor did the demonstration end there; in 1953, with 584 million bushels the crop was the second largest in all the years of cropping and in 1954, while the wheat country suffered semi-failure due to rust and wet weather and hail, it was apparent from growth that the soil was ready to do its part to make it another record year.

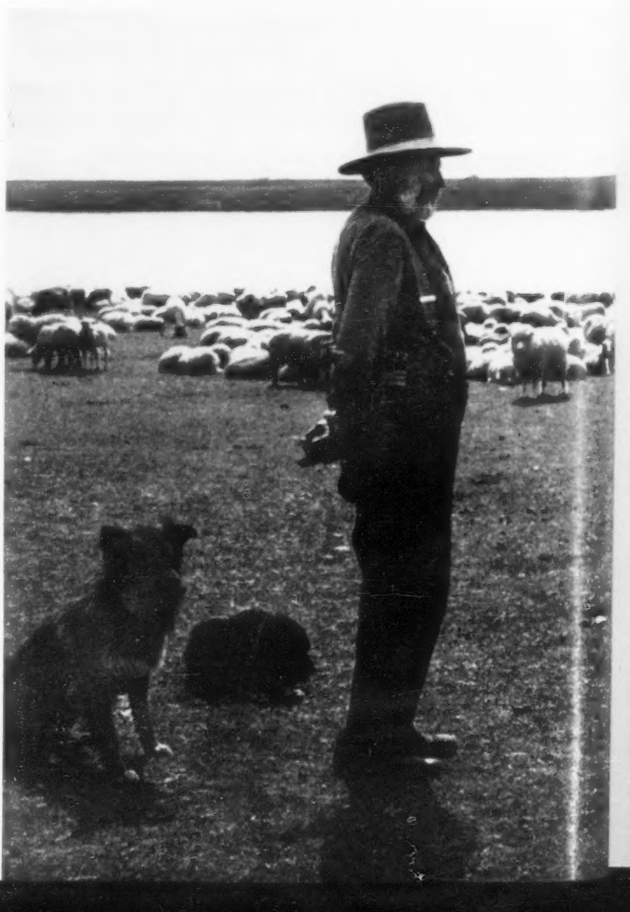
*The drought area which Capt. Palliser delineated in 1858 stretches along the 49th parallel from western Manitoba to the Rockies, and north to about Lloydminster, on the Saskatchewan-Alberta border.

Every informed person will agree that soil losses did occur through the years, and nothing is more important than conservation of that most precious of Canada's resources, the agricultural soil. And with almost three-quarters of the arable soil of Canada in Manitoba, Saskatchewan and Alberta, the challenge of conservation should be impressed upon every westerner. But for all Canadians and people elsewhere to know, the soils of the West are fertile and deep and productive and with a growing consciousness of conservation importance, will continue to furnish food for people in many countries.

A big factor in rehabilitation following the years of drought and drifting soils was the Prairie Farm Rehabilitation Act, better known as P.F.R.A., passed in 1935. Ten years after its program was started it had given assistance in the construction of thousands of stock watering dams and water storage dug-outs and over a thousand irrigation projects, with work completed or well advanced on 108 large projects to develop or restore irrigation on 202,000 acres. And 75 community pastures in Saskatchewan and Manitoba were providing a million and a half acres of grazing for nearly 68,000 cattle and horses and 3,000 sheep. P.F.R.A. seemed to be a good investment.

Wheat was "king" throughout the fifty years, but the criticism that the West was "one crop" country was not exactly fair. From the earliest years, cattle ranching and sheep ranching were vigorous parts of western agriculture and livestock played a considerable part in nearly all farming districts. Some of the most colourful personalities in the early West were stockmen, and their contribution in seeding the countryside with improved animals should not be overlooked.

Prairie sheep rancher. C.N.R.



As notable as Seager Wheeler's world championship with prairie-grown wheat in 1911 was the record of cattle winnings by Brandon's J. D. McGregor at the International Fat Stock Show at Chicago in 1912. Nobody supposed it could happen, that a single herd from the new soil of western Canada could win Chicago championships; but the Glencarnock cattle won first prize for Aberdeen-Angus herd, while from the same Canadian farm, Leroy 3rd of Meadowbrook won the Aberdeen-Angus bull championship, Violet 3rd of Congash the cow championship, and Glencarnock Victor the steer grand championship. Then to prove that it was not an accident, another McGregor entry, Glencarnock Victor 2nd, was grand champion steer at Chicago in 1913 to place the western Canadian herd in the singular position of having won international steer championships in two successive years.

And in a strikingly short period after prairie buffalo vacated the western grass, Saskatchewan- and Alberta-raised representatives of other livestock types and breeds were winning international honours. It seemed difficult to believe, in 1928, that Ben Thomson's Holstein cow, Canary Korndyke Alcartra, eating feeds grown on the home farm west of Moose Jaw, had produced 1080 pounds of butterfat in 305 days to become a world champion producer in the four-year-old division. And a short time later, exactly 64 years after the first pure bred cattle of the breed were introduced to Canada and 62 years after the rails reached the country that is southern Alberta, a Holstein cow owned in the Hays herd at Calgary, produced 1409 pounds of butterfat in one year to become champion fat producer for all breeds, all ages and all countries of the world.

It was becoming increasingly clear that the new soil, so long despised for agriculture, could grow anything.

The record was a little different in the case of horses. Those noble animals had performed the principal service in breaking up the homestead sod, and horse breeding had flourished. The horse ring was the most colorful section of every pioneer exhibition and a stallion championship was the most coveted of awards. The forty-one stallions that came before the judge in the single class for two-year-olds at Brandon Winter Fair in 1912 gave some idea of the general interest in breeding drafters. The mighty and cumbersome steam tractors of that period were still not much of a threat to the supremacy of the horse. But there came a change; small and versatile gasoline tractors were introduced and farmers found them handy and economical. A farm revolution was in progress and tractors were winning against horses. Farm tractors increased until it could be said in 1953 that tractors in the West numbered just about one per farm on the average and breeding of the heavy horses had fallen to the point that a Clydesdale, Percheron or Belgian foal was a novelty of sufficient importance to cause a tourist to stop his car for a second look.

The general western trend was toward diversification both in and out of agriculture. The West demonstrated its capacity to produce bacon and other products of mixed farms in those years of the Second World War when foods of animal origin were a special need.

For some years it seemed that agriculture would be the West's only industry; but as the 50-year period drew to a close, nothing was more obvious than the presence of "other strings" in the West's "economic bow." The importance of oil, gas, minerals and manufacturing has become ever clearer. That, however, is not a detriment to farming. Agriculture has some new partners, and that's good for agriculture and good for Canada. ◆

A group of combines gathering up swaths of wheat. C.N.R.

ARCTIC SCHOONER VOYAGE

Story and photos
by E. O. Hohn

Dr. Hohn, who wrote in the "Beaver" year ago of his visit to Banks Island, he tells of his subsequent adventures.

Some of the Carpenters on board the "North Star." Left to right: Skipper Fred, his daughter Agnes, and son Andy with his younger brother.

IN July 1953 I was sitting on one of the barren coastal hills of Banks Island about 400 miles inside the Arctic circle and looking down over an area of open water to the sea ice, stretching away to the horizon. From time to time two black streaks broke the surface of the water. They were bowhead whales cruising north along the floe edge, and through my telescope I could see the conical clouds of the spray of their blowing.

I had flown in to Banks Island early in May on an R.C.A.F. plane, realizing a long cherished dream of investigating its wild life and collecting scientific specimens (*Beaver* Autumn 1954) and was now living with the Eskimos at Sach's Harbour, the only settlement on the Island. When the sea becomes navigable in late July the natives travel in one or more motor schooners to Tuktoyaktuk on the mainland about 100 miles from Aklavik, returning to Banks again just before freeze-up. I was going to make my own way homeward by travelling with them as far as "Tuk."

The two schooners, the *North Star*, 55 feet, owned by my halfbreed Eskimo host, Fred Carpenter, and the *Reindeer* of 35 feet had been hauled up high and dry on the beach since last fall. They were first repainted, and then came the job of launching them. The boats were resting with the keel supported by a few beams laid crosswise. These were greased with seal blubber and thus becam skids. Using a jack against the keel and with every man the place pushing with his back against the boat alternate at the stern and at the bow, the boats were shifted a fo or so at a time and finally broadside into the water. Ho ever, their launching didn't mean we were free to go. The was open water for about a mile offshore, but beyo that the ice was still unbroken. Every day we'd climb t nearest of the coast hills behind the settlement and ex mine the lay of the open water. Seeing the whales on t 19th of July was a good sign, as it indicated open wat to the south of us, for it seemed unlikely that the whal would swim long distances under the ice. However, was not till the 29th that the experts felt we had a go chance to get through.

The *North Star* carried quite a crew. There was Fr Carpenter, one of his sons of about 20, a teen-aged daught and a little boy. The Carpenters slept in the bunks of t cabin forward of the engine. Pat Herschel, a bachelor about my age, and I had our sleeping bags on the cab floor. The pilot house accommodated another marri couple and their little girl, while the forepart of the ho adjoining the forecastle, which was kitchen and messroom held Bertram Pokiak, his wife, two teen-aged daughte and five younger children. On top of 18 people we had sled dogs chained on deck and a captive wolf, kept f breeding with the dogs. The Bankslanders have to trav with all their essential equipment. As ice conditions som times prevent their return to the island, they must b prepared to put in a winter's trapping wherever they ma happen to get stuck. That's why we had the dogs as we as two sleds tied to the railing, and sacks full of fox traps.

The loading of the dogs was quite a game—hardly an of them would walk the gang plank, so we simply haule them up by the chains fixed to their tight collars. I feare this would break their necks but it seems they can take it The wolf was a more awkward proposition. First a lon

Dr. Hohn is associate professor of physiology at the Univer sity of Alberta.

chain was manipulated around his neck and this was held tight by a man on each side, then he was knocked on the head with a piece of two-by-four till he was pretty groggy and a muzzle slipped on. After that he was no more of a problem than the dogs.

I already knew that in some years the natives were unable to return to the island after their trip to the mainland, but it was only now I learned to my dismay that they didn't always get out. One year they had been unable to get to the mainland and had only reached the trading post of Holman Island off the coast of Victoria Island. With some anxiety I calculated what it would cost me to charter a plane to take me off from there, if this should happen this time. Pat Herschel was our habitual pessimist. He was quite sure that that was just what would happen. However, earlier on, before I'd set out on a week's tramp with only a pack dog for company, he had prophesied that I'd get lost and would be spinning around on the plains in a fog and that I'd be attacked by bands of wolves. Actually I never saw any wolves, so I took his forecasts with a pinch of salt.

After last minute jobs like taking some barrels in the dinghy to the nearest stream for a load of drinking water we were off in mid afternoon of the 29th of July. It was a fine mild sunny day as we passed down along the southwest coast of Banks Island, ice floes to our right, the barren brown hills of the island with occasional snowdrifts to our left. We saw a bearded seal and then a large flock of male king eiderducks—a sort of bachelor club. The females of these birds were still on the island hatching eggs or tending their young on the tundra pools. When it was as dark as it gets here at this time of year, with an orange glow on the water and the ice from the low sun, two bowhead whales passed close by as we were bumping among the smaller ice floes.

It was soon clear that because of the ice we could not take a direct course southwestward for Tuk and we had to follow the Banksland coast further. When I awoke next day both boats were moored to ice floes as ice barred our way in any useful direction. It was a beautiful scene—a clear blue sky over the darker blue water and the shimmering expanses of ice, while to the north we could see the cliffs of Nelson Head, the most southerly point of Banks Island. We remained all day. I wandered about the ice a bit to take pictures. We heard a plane that day but never saw it. For me it was the first sign of the existence of the outside world for three months. Occasionally a ringed seal would surface nearby, and two were shot and hauled in. In the evening we moved on again eastward, the only direction open to us.

About midnight we saw a polar bear wandering about on the ice and stopping every now and then with head raised scenting the air. Both boats were manoeuvred into range. I got onto the foredeck of the *North Star* with my movie camera while two of our lads with rifles took up their station beside me. Soon the bear was in range and shots rang out wildly. The bear went off at a loping gallop but was soon hit in the thigh where a patch of blood appeared. This delayed him, as he sat down for a moment to bite the wound, but soon he went on again. Once more he was hit and fell on his back but got up again and floundered into a pool in the ice where he seemed to have difficulty keeping afloat. By the time we jumped down onto the ice floe and got to him he was dead. The bear, which proved to be a male, was disembowelled on the spot and it was surprising to see how out of an empty sky four glaucous gulls and two herring gulls appeared in no time, to feed on the remains.

By the next day it was clear that our only chance to reach the mainland would be somewhere southeast of Banks Island, well to the east of our intended route. At 5:30 in the morning land was visible ahead and by noon we were some ten miles off Pearce Point, but an unbroken ice floe prevented us getting nearer and turning west. It was therefore decided to turn northeast and cross Amundsen Gulf to Holman Island. Soon all the ice was left behind and the scene became summery as we cruised through a blue sea with the *Reindeer* following in our wake. In mid-afternoon we saw a white whale, a small species as whales go, only about twelve feet long with its grey calf beside it dipping through the waves. These whales are hunted with rifles in the Arctic and harpooned when a shot has slowed

Launching the 35-foot "Reindeer" sideways on skids greased with seal blubber.

On board the "North Star." Note the sled dogs, and the sled lashed to the rail.

them down. However, the two never came within range though they surfaced several times ahead of us.

About nine in the evening part of the Victoria Island coast loomed up and we anticipated reaching Holman Island about midnight. I was doubly glad of this—I'd been out of tobacco for a month and was rather fed up with smoking the dried leaves of the arctic creeping willow; also the Hudson's Bay post had a radio transmitter and this was my first chance to send a message to my wife since I'd left home in early May. Soon we were under the tall cliffs which make an impressive backdrop to the little settlement. The R.C. mission here is the scene of most of Father Buliard's book *Inuk*, and his successors, impressively bearded as most of the Oblate fathers in the north are, came down to greet us. It was not long till I had something better than willow leaves in my pipe.

August 1st was our first full day at Holman Island. I was amazed at the luxuriance of the vegetation compared to Banks Island where no flower had been over five inches tall. Most of the natives who trade here were in camps on Minto Inlet where the fishing is good. They are rather poor, and Don Matheson the Hudson's Bay post manager told me that he had done more business buying just part of the fur catch of my companions than from the season's trapping of all the local natives.

We stayed at Holman Island for several days. On August 4th Father Metayer of the R.C. mission received a message that there were two sick women at the Minto Inlet camp and he asked me to come along with him to examine them. We made the trip in the mission's little six-ton motor boat, leaving about noon and following a barren rocky coast with many parallel ridges ending in steep bluffs at their northwestern extremities. About midnight we arrived at a camp of about ten tents on a bleak, flat shore. Some of the men were out fishing in jolly boats. These people are obviously very poor. The normally colourful print parkas of the women were all the same nondescript dirty grey and every one was a bit ragged. One young woman was running a fever from an alveolar abscess. She had already pulled out the offending tooth but I extracted its neighbour to allow better drainage. We also gave her a penicillin injection and decided to take her back to the settlement in case she should need more injections.

Our last patient was an old lady whose main complaint, as translated for me by Father Metayer, was loss of appetite. The father and I went into the tent of this woman with her husband, to examine her. Kneeling down on the turf I thought I could feel an abdominal swelling of some sort and advised the old lady to come with us in the *North Star* to Aklavik, where she could be fully examined in the hospital. The old couple discussed this and finally agreed—though we all knew it would probably mean a year's absence from home for her—provided we also took along her two youngest children. With everything settled we returned to Holman Island with quite a crowd, as the families of both patients came with us as well as two other families whose row boats we towed along behind. We travelled in a dense fog and I remember that Jack Goose, the father's boatman, fried me an excellent caribou steak about three in the morning. By ten next morning we were back and I slept till ten in the evening when we had a dance which kept us all up till about 3 a.m. again.

The two Oblate fathers were about to set out shortly for Coppermine in their small boat and they offered me a passage. From Coppermine I could return home to Edmonton about as easily as from Aklavik. I was greatly tempted to accept their offer. However it was clear to me from what I had seen of their boat on the trip to Minto Inlet that it would be held up by adverse weather more readily than the larger Banks Island schooners. So I decided to stay with my Banksland friends. It was as well that I did so, as the fathers were lost in fog and strong currents for about 18 days on their way to Coppermine. They became the objective of an R.C.A.F. search and were taken off by plane to Coppermine on September 2nd by which time I had already been home in Edmonton for a week.

On August 5th we loaded all the dogs and the wolf back on the schooners but did not leave till the evening of the

7th. During the night the sea became rough and we turned back to anchor among a group of rocky islets on the north shore of Prince Albert Sound. Once more all dogs were taken ashore and chained up on land. Getting them off the boat was much easier than taking them aboard, we simply tossed them overboard and they swam the few feet to shore. Eskimo dogs are not exactly friendly to strangers but by now they were all so used to me that they were just as respectful of me as of their owners and I took some satisfaction in grabbing some of the big brutes by their collars, passing a hand under the belly just in front of the hind legs and heaving them over the side.

We stayed moored to our dismal islet all that day and the next morning, but after lunch sailed off again. Before noon next day we could see the mainland, and a day later we passed close to Cape Parry where a fine bull caribou was wandering right on the shore. Charlie, on the *Reindeer*, got up on his pilot house roof, started shooting at it and scored a hit as it was running fast. A dinghy was lowered to take ashore a party which cut up the caribou and brought a quarter to the *North Star* too. Lately we had been eating some of the seals shot on the way and I found caribou decidedly more to my taste. In the evening we anchored in the narrows of a deep bay in one of the Booth Islands just West of Cape Parry. As a gale was coming up which would probably keep us there, we had once more the happy task of unloading our 50 dogs and tying them up ashore. During the night the wind drove masses of ice into the bay behind us. It was clearly impossible for the *North Star* to push its way out through this ice jam and it looked as if we might have to stay for several days till a change of wind should push the ice away again. However, we were in luck. The Hudson's Bay motor vessel *Nechilik* on her way eastward from Tuk came into the outer bay and spotting our mast bumped her way in to us. The *Nechilik* has a metal hull and flat bottom and can get her bow over the ice and so can crack and push the floes aside. She came alongside, then towed us out.

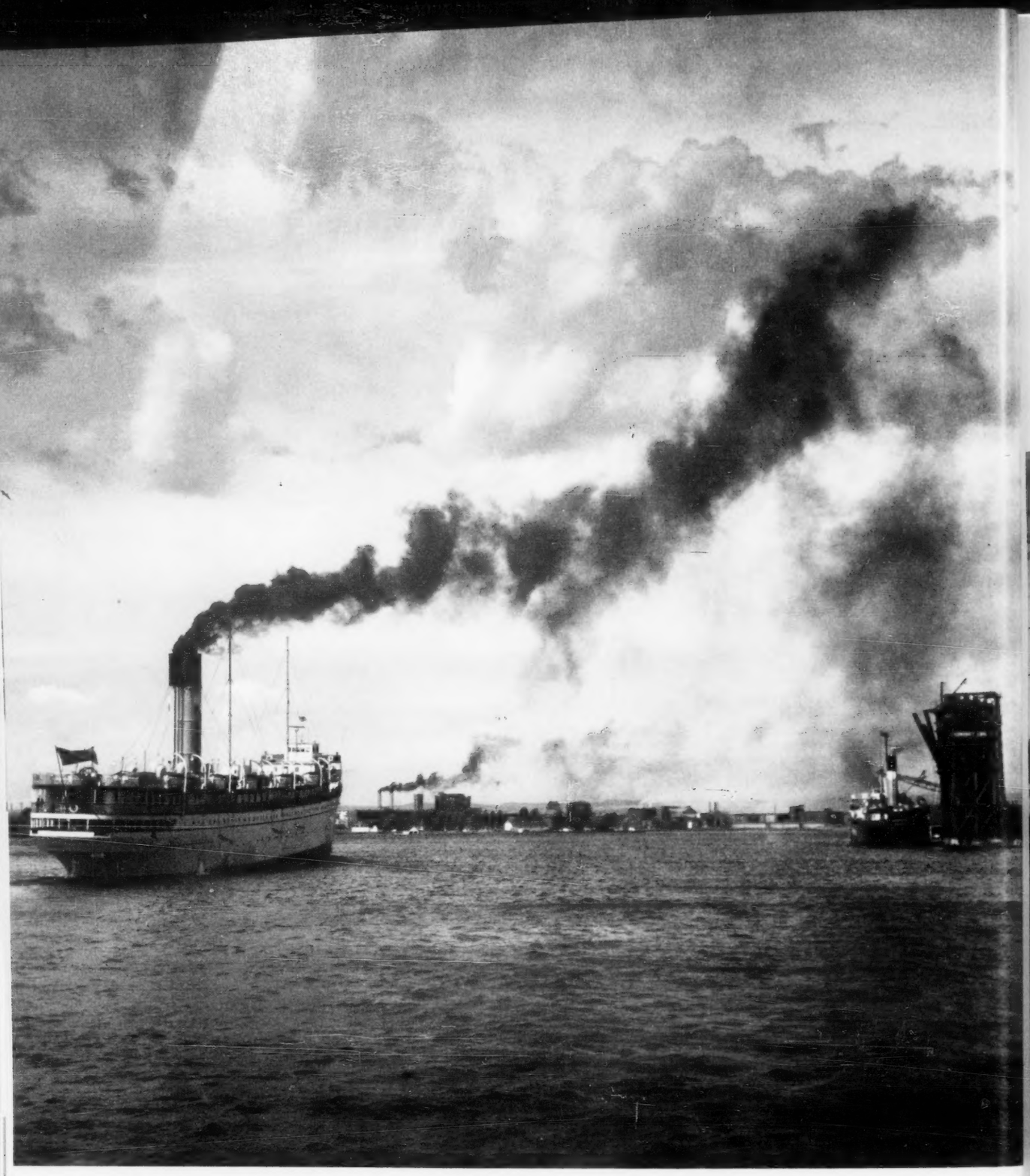
We reached Baillie Island that evening. This would have been the first landfall on the normal trip out of Banks Island. Next day there was a thick fog and we remained anchored off a desolate sandspit all day. It was a day of inactivity and I noted the scene in our crowded forecastle in my diary:

The space is triangular following the lines of the ship's bow, about ten feet long with a table running down its length and a narrow sitting shelf on either side with a stove at the base in one corner of the triangle and a ladder leading up to the deck in the other. Beside the ladder is an opening leading into the front of the hold where the Pokiak family sleep. Sitting in this opening two little Pokiaks are arguing at the tops of their voices in Eskimo. Beside them, Susie, Peter's wife, is crouched on the floor. She is fortyish and has wisps of black hair hanging over her face. She has a rather long nose, which her daughter Navaluk has also inherited. An intense discussion is going on between mother and daughter. Beside Susie again is Andy Carpenter rolling a cigarette. He is a young man of about twenty showing almost no sign of Eskimo blood and looking like any farmers' son outside. Near Navaluk is Frankie, the youngest Pokiak. He is generally seen wearing nothing but a little shirt and his cherubic behind is much in evidence. Angun, his 11-year old brother is just climbing the ladder to get some water for Frankie while at the same time the husky Pat is trying to come down bellowing at the top of his voice that the wind has shifted and "we'll jolly be stuck here for a week."

I'm sitting on the floor which is littered with odd bones from the last meal and scraps of paper which the children have made into toy sleds, almost certainly humming some cowboy tune, as that is all we've heard on the gramophone for weeks. Opposite is the oldest Pokiak girl, about seventeen. Her long black hair frames an attractive oval, rather full-lipped face and she has exceptionally large black eyes. Nearby is her younger sister Iliguk with a more mongolian type of face, flat with high cheekbones, nice eyes, full lips and very white teeth. At my right is Andy's sister Agnes, about eighteen. She also has much of her black hair hanging over her face as she reads an old schoolbook with great concentration. Visible in the hold is mama Pokiak looking rather shapeless in her ankle-length "Mother Hubbard" parka, trying to restrain the argument between her two younger children. A bit further in the hold father Pokiak is sleeping peacefully through it all. Outside the wind rages, slapping waves against the hull and every now and then the dogs on deck drag their chains and let off a dismal howl . . .

Next day we were off again, reaching the harbour of Tuktoyaktuk at 5:30 a.m. on a grey morning with the rain pouring down. With the greatest joy I flung the dogs overboard for the last time. Our poor wolf was so eager to get ashore that he jumped over the side three times and hung there dangling on his chain. Luckily for him he was pulled back each time. This required no special courage as he was muzzled and by now miserably thin. Tuk was the end of our cruise which had taken much longer than expected but had been full of interest. After a few days' waiting, a plane took me off for Aklavik and from there I left for home the same day.

The author with two friends at Holman Island.



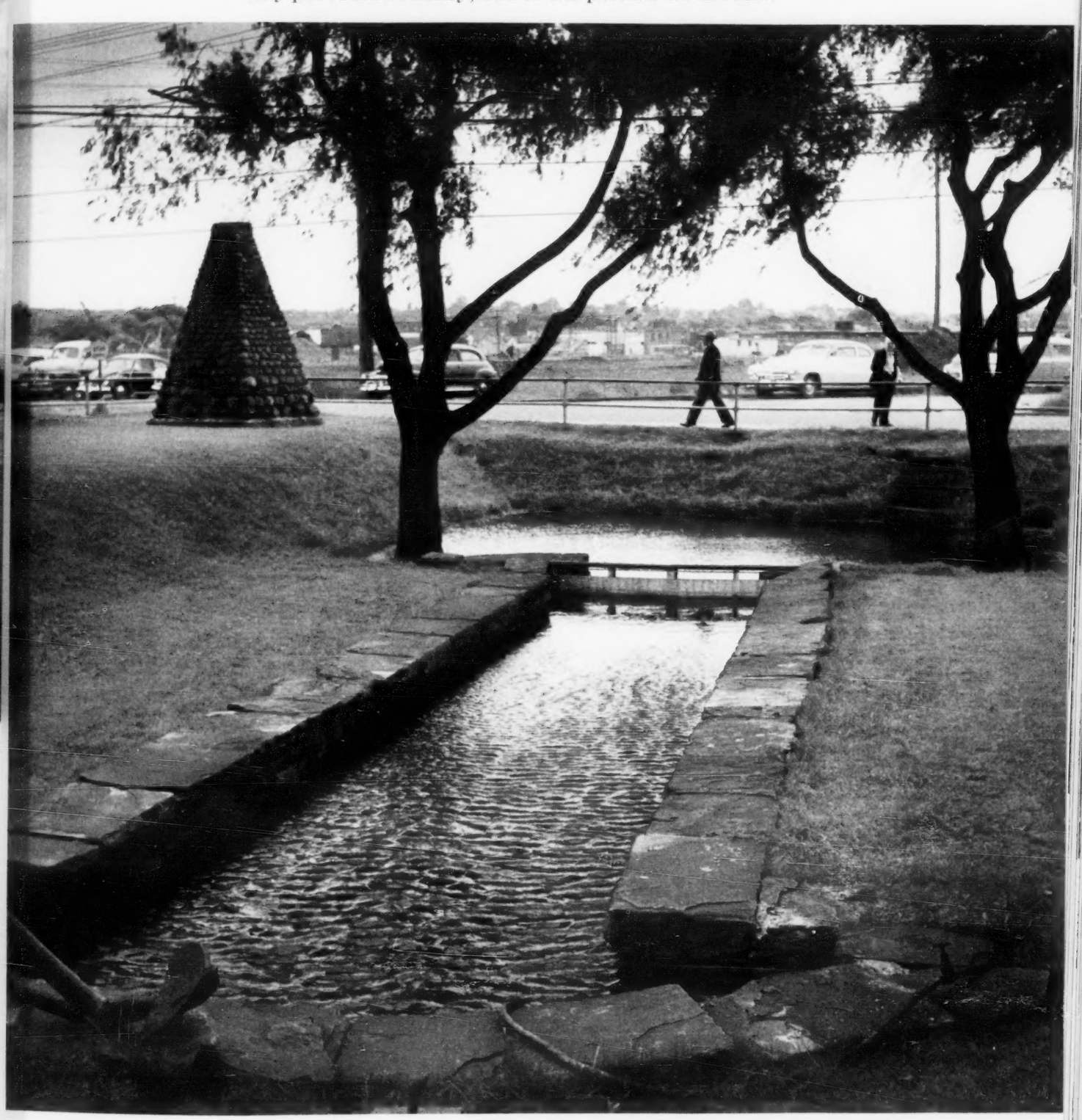
A Canadian Pacific passenger vessel steams up the St. Mary's River towards the lock at Sault Ste. Marie, Ontario. To the right of her bow can be seen the buildings of the paper mill.

ST. LAWRENCE SEAWAY-IV

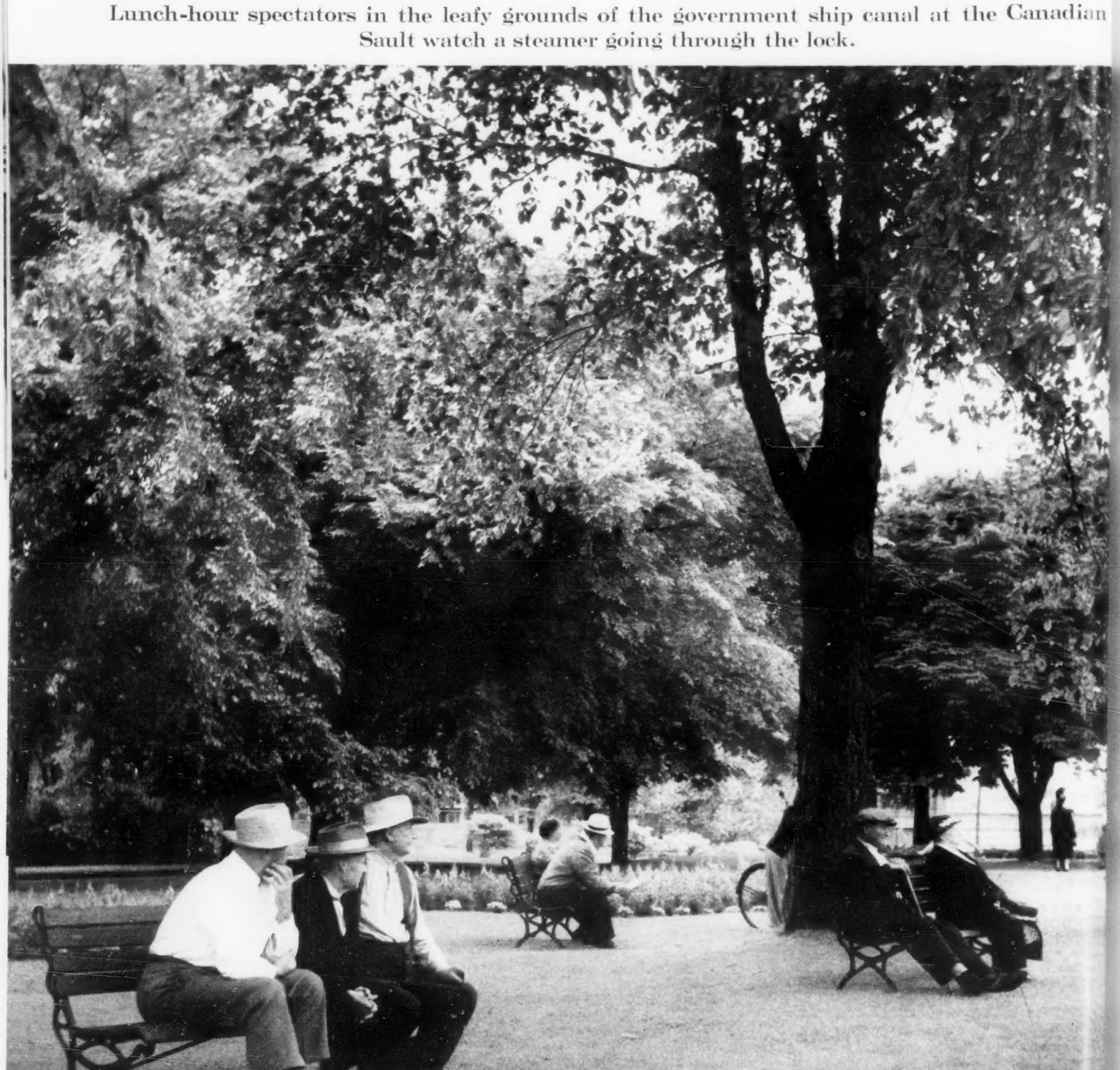
by Rosemary Gilliat

THE LAST INSTALMENT IN MISS GILLIAT'S STORY OF THE GREAT AND HISTORIC WATERWAY THAT REACHES FROM MONTREAL TO THE HEAD OF LAKE SUPERIOR.

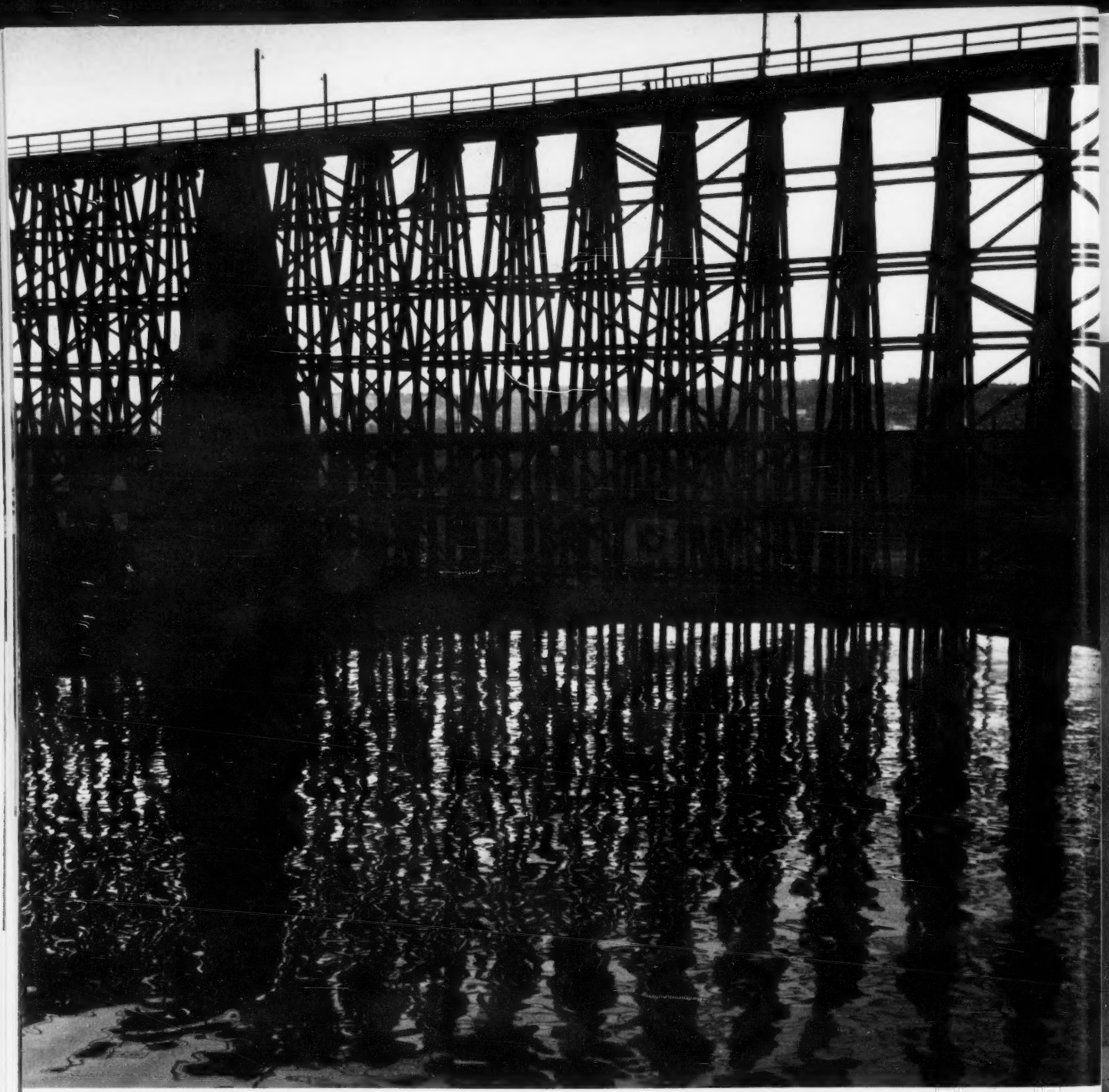
The reconstructed first lock at the Sault in the grounds of the paper mill. The original lock was built here in 1798 for the canoes and bateaux of the North West Company. The Hudson's Bay post stood nearby, out of the picture on the left.



Lunch-hour spectators in the leafy grounds of the government ship canal at the Canadian Sault watch a steamer going through the lock.



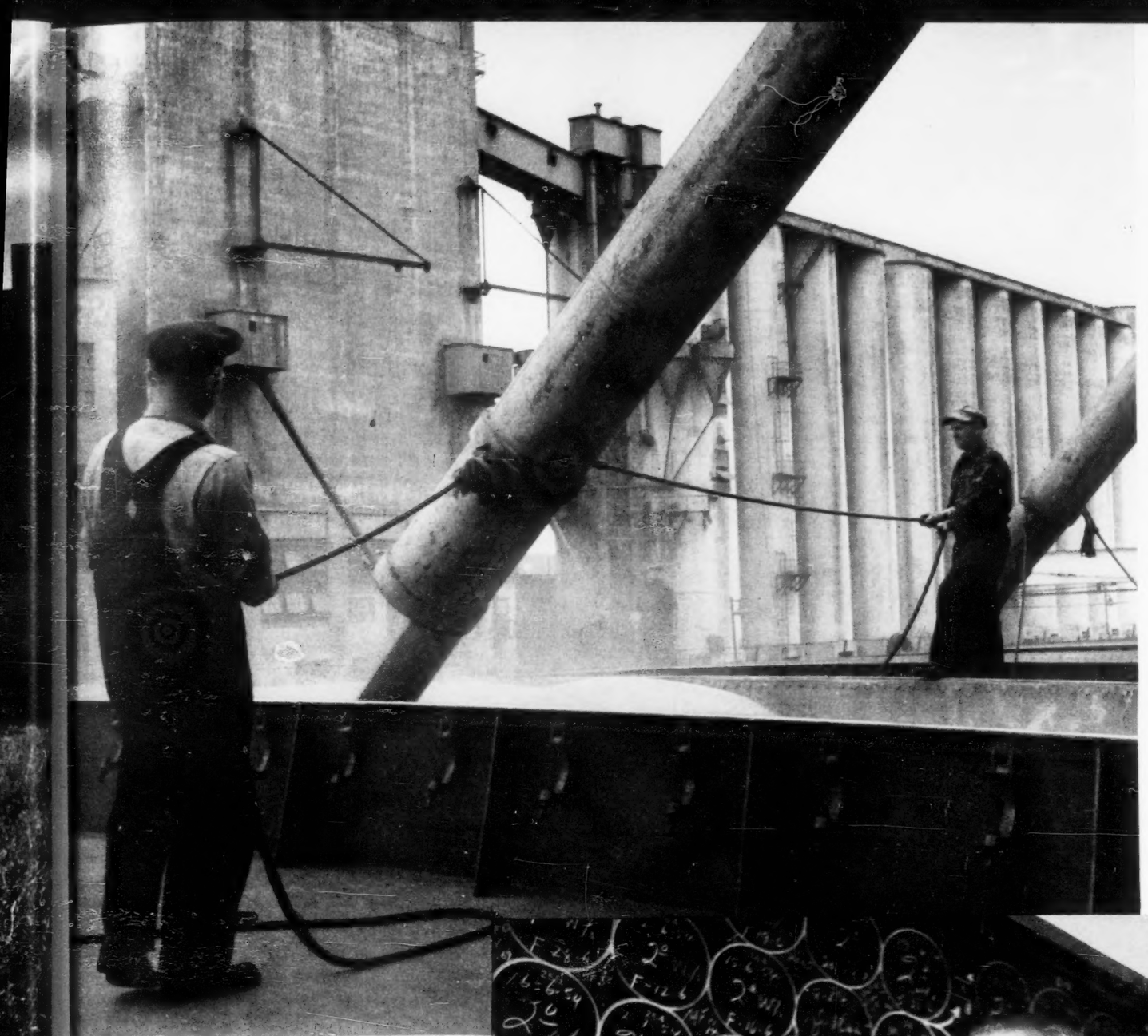
An American pleasure steamer locks through the Canadian canal, upbound for Lake Superior. This year sees the 100th anniversary of the completion of the first lock at the Michigan Sault. The 900-foot Canadian lock, opened in 1896, was until 1914 the longest on the continent. In the latter year the Davis lock was opened on the American side, with a length of 1350 feet—350 feet longer than those of the Panama Canal.



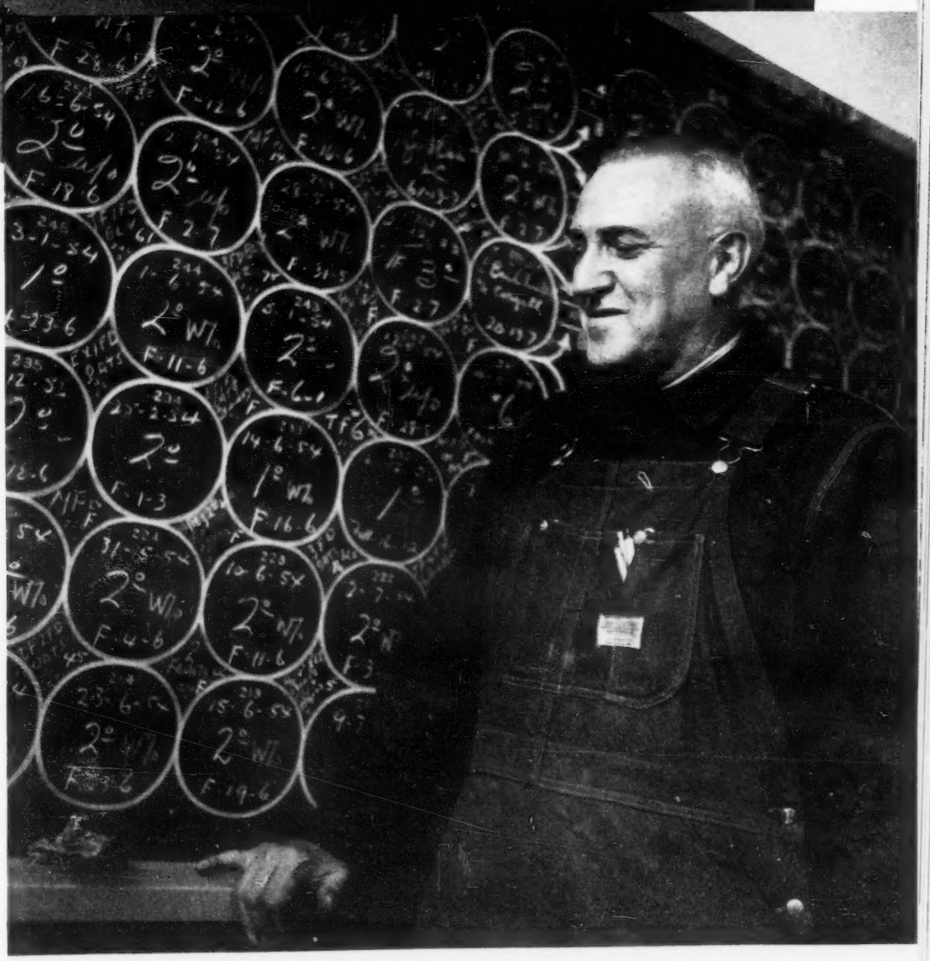
At Port Arthur the wooden trestles of the railway which carries trains to the C.N.R. ore dock make an intricate and fascinating pattern on the water.

The interior of an extension to the C.N.R. ore dock at Port Arthur, which can now hold 60,000 long tons, and is the largest in Canada. Workmen are walking through pools of water left by a storm. The 5,000,000 tons of ore handled here annually comes from the Steep Rock mine, 125 miles to the west.

Canada's largest grain elevator—Saskatchewan Wheat Pool No. 7—at Port Arthur, is a strikingly beautiful example of functional design.

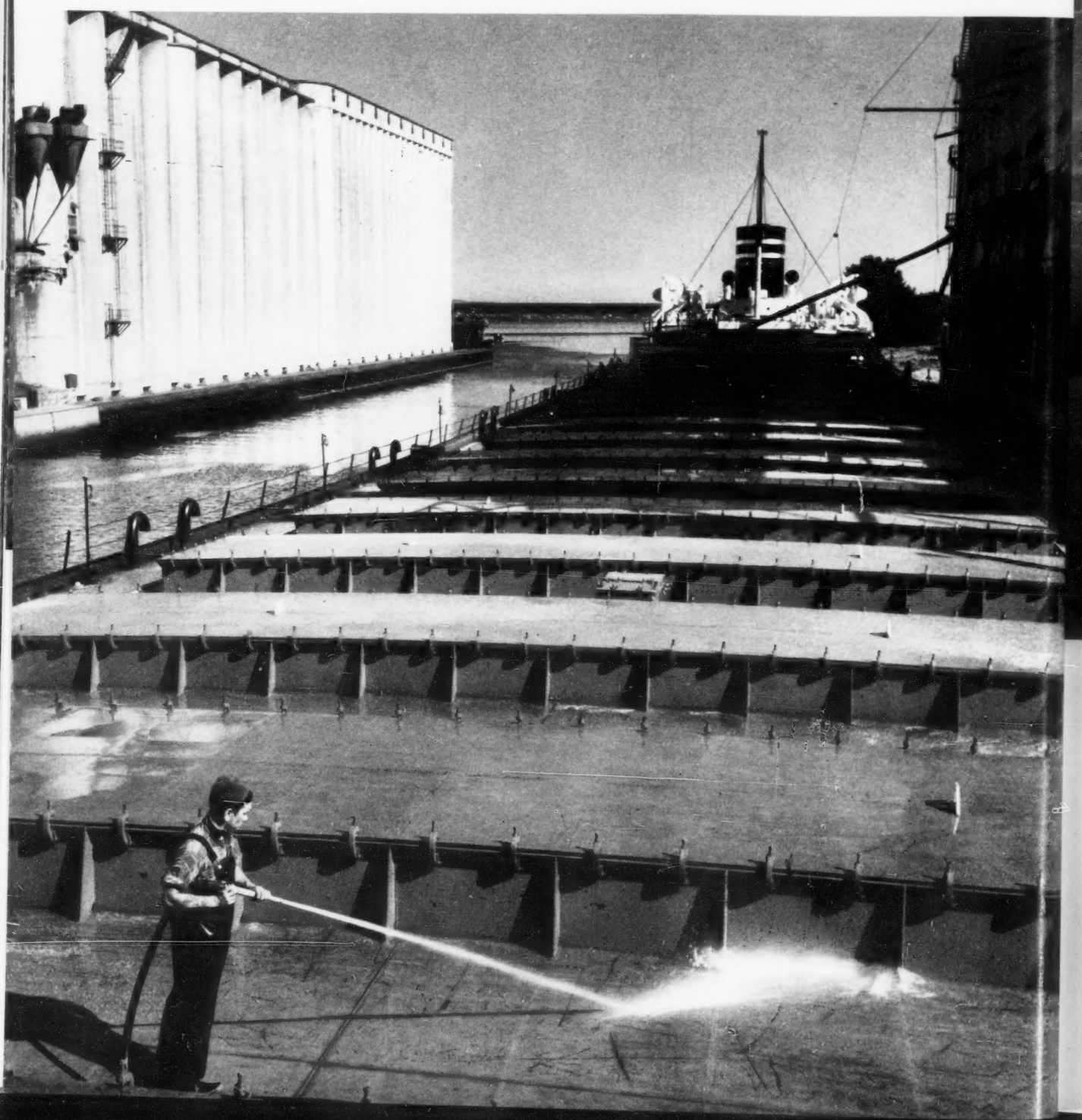


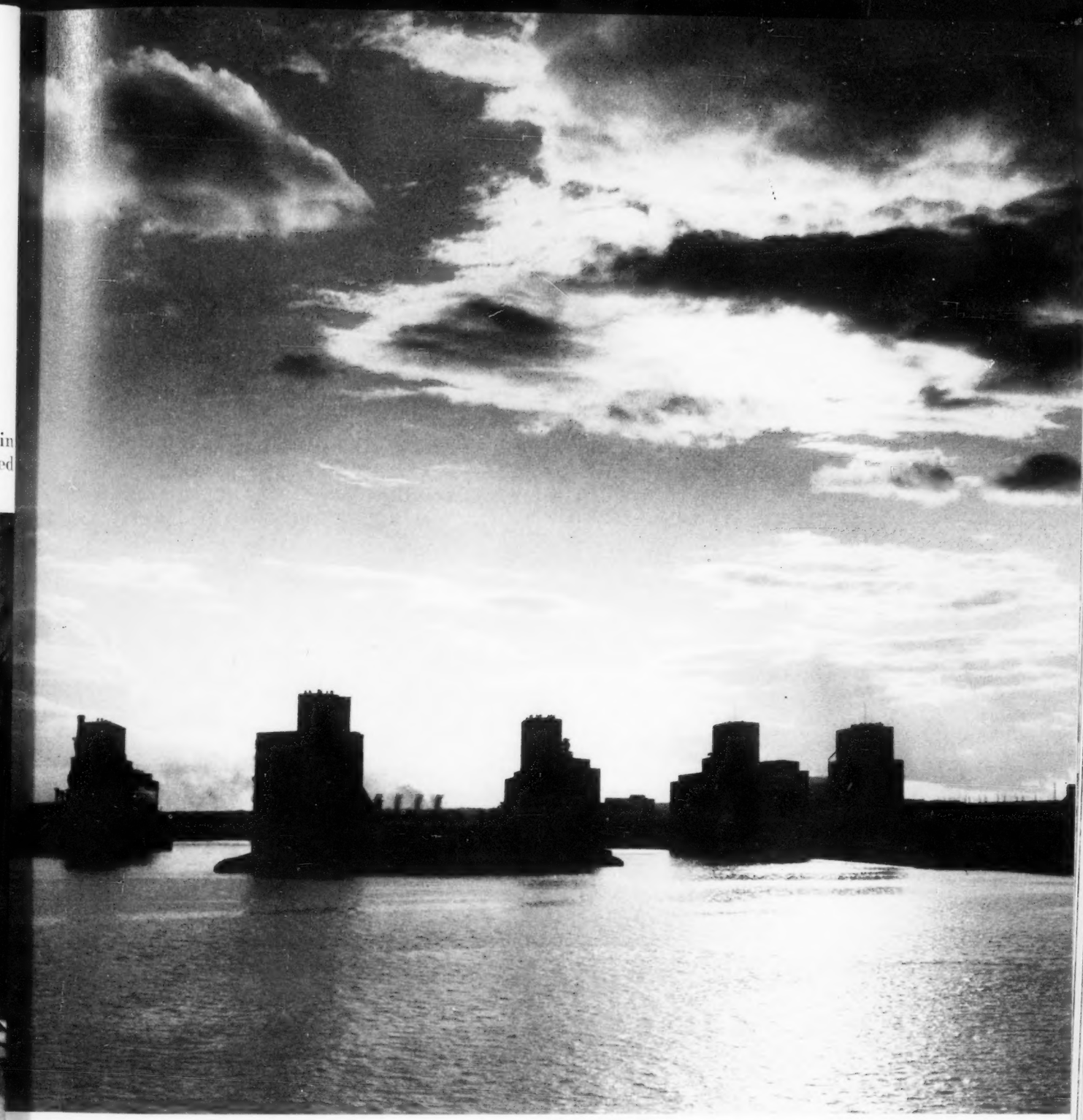
In a steady golden stream, grain from the Canadian prairies is poured into the hold of a carrier at the lakehead.



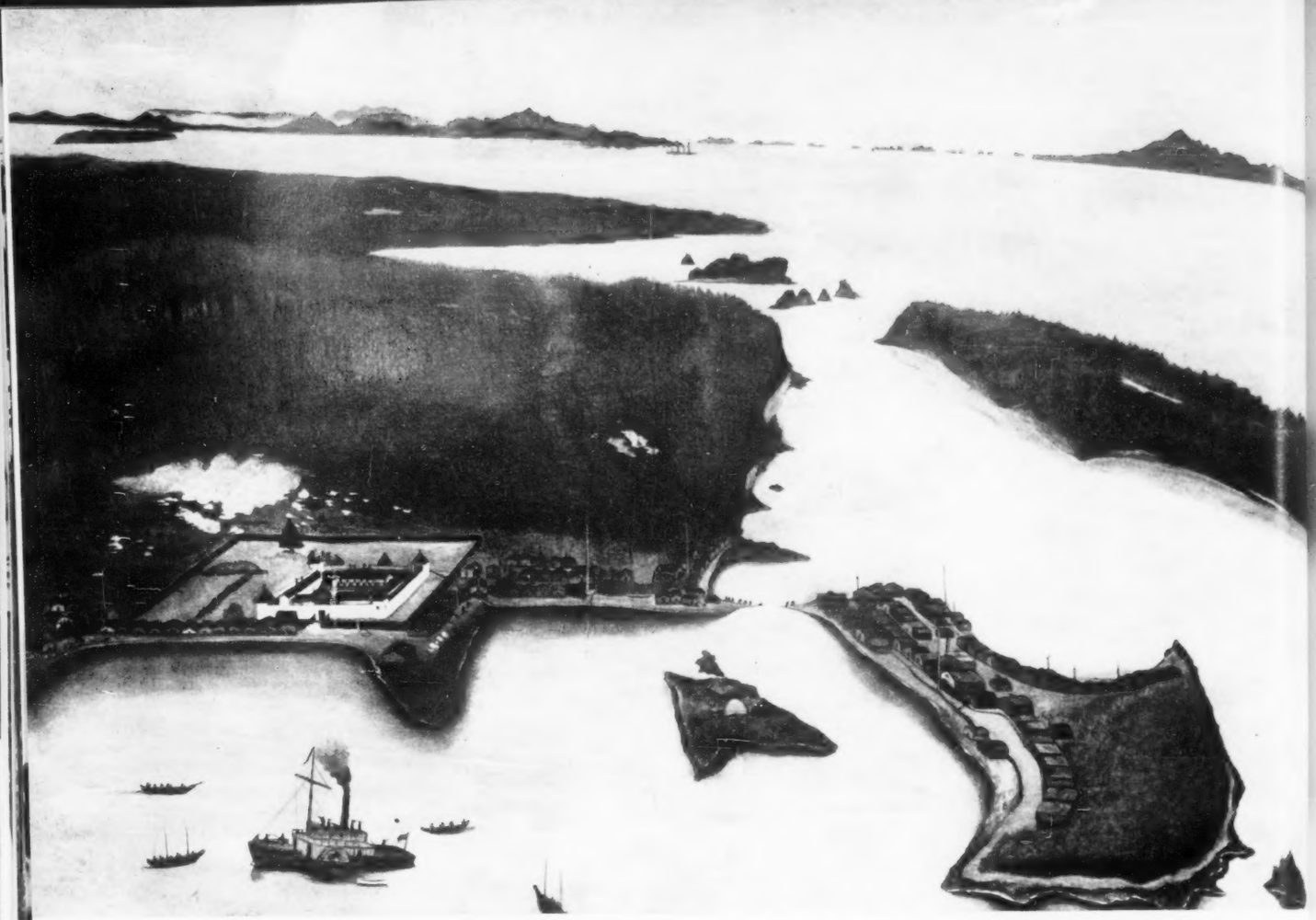
The foreman of elevator 4B stands beside the diagram showing the up-to-the-minute storage situation. The circles represent the 32,000-bushel cylinders. In between them are bins containing 7,500 bushels each. Altogether No. 4, which belongs to the farmers of the Saskatchewan Pool, holds 8 million bushels.

With a full hold and hatches battened down, the big ship undergoes a thorough hosing, in which the spilled grains of wheat and the fine film of dust that lies over everything are washed into the scuppers.





From the deck of the loaded freighter, bound for the Sault and Welland Canals, the grain strongholds of the lakehead stand like castles against the sunset.



The "Beaver" in harbour at Port Simpson, surrounded by dug-out canoes. Painted from memory by Frederick Alexie, a half-breed Tsimshian. Natl. Museum

Pacific Coast Fur Trade

When the Hudson's Bay Company moved into the Pacific watershed, they had to wrest the maritime trade from both the Russians and the Americans.

by Corday MacKay

BEFORE uniting with the Hudson's Bay Company in 1821, the North West Company had a number of posts on the west side of the Rockies; but they made little attempt to enter the maritime fur trade, leaving that to the American ships from Boston. After the union, however, a change in this policy was made. George Simpson, the energetic governor of the newly organized company, strongly recommended that decisive steps be taken to wrest the coastal trade from their Boston competitors, and also from the well-established Russian posts farther to the north. To gain this end, two methods were devised. Trading posts would be built along the coast from Oregon to Alaska. In addition, trading vessels would travel from village to village collecting furs and carrying them to a central depot.

The building of the posts began with the establishment of Fort Vancouver, on the Columbia, in 1825. This for over two decades was to be the centre and heart of the whole Columbia Department, handling inland as well as marine trade. Fort Langley was built on the Fraser in 1827; Fort Simpson on the Nass in 1831, but three years later was moved to a more strategic site, the situation of the present Port Simpson. To this latter post, it was hoped, the Haidas from the northern part of the Queen Charlottes, forgetting their feud with their ancient enemies, the Tsimshians, would bring their furs. Fort McLoughlin on Millbanke Sound, built in 1833-4, might draw the natives of the southern part of the Queen Charlottes. Farther north again in 1840 Fort Stikine and Fort Taku were established, though they as well as Fort McLoughlin were later abandoned as unnecessary. No post was built at any time on the Queen Charlottes themselves, the Company officers believing that the regular visits of the trading

Corday MacKay is associate editor of the Semiahmoo Sun *at White Rock, B.C., 27 miles south of Vancouver. She did the research for this article mostly in California, where she lived from 1949-53.*

vessels would suffice. Moreover, the Haidas had for long held the reputation of being fearless and inveterate travellers. It was expected that in following their own usual trade routes to the oolachan runs up the Nass, they would frequently call at the mainland villages and posts.

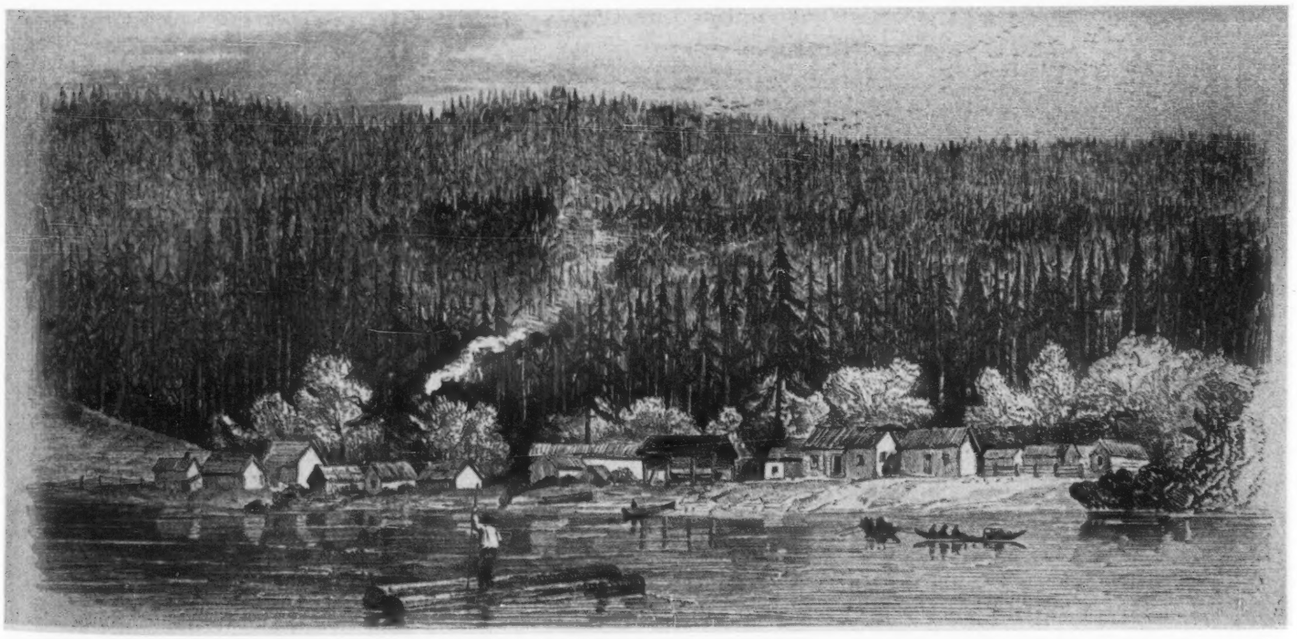
The first Hudson's Bay ship to offer direct opposition to the Boston traders was the little *William and Ann* which was sent north in 1825. Built in Bermuda, she had sailed from Gravesend on July 27, 1824, with David Douglas the botanist as passenger, and reached Fort George (via Rio de Janeiro) on April 12 the next year. On June 2nd she left the Columbia for the Queen Charlotte Islands, but to Dr. McLoughlin's disappointment only went into Observatory Inlet and up "De Fucas Straights." After a summer of trade in which she collected 437 pelts, mostly beaver, the *William and Ann* left the Columbia for London on October 19, 1825. Four years later, on a voyage from London to the Pacific, this little pioneer of the Hudson's Bay marine trade was wrecked on the Columbia bar and all hands — numbering twenty-six — were lost.

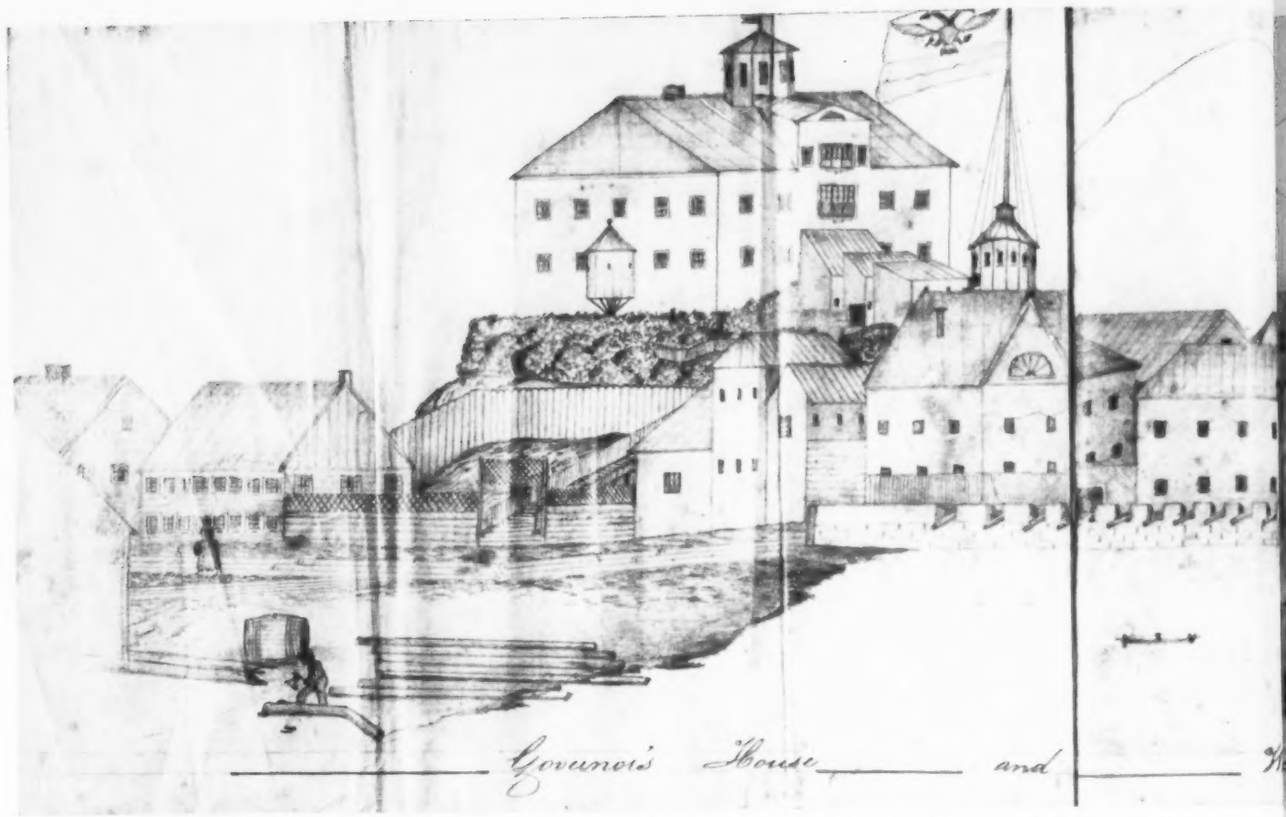
Other ships which entered the Company's service over a period of years were the *Cadboro*, *Vancouver* (a schooner built at Fort Vancouver), *Eagle*, *Dryad*, and *Llama*. The coming and going of all these vessels, as well as the news of the fur returns, fill many pages in the letter books and journals kept so faithfully by the officers of the Company during their lonely vigils in their isolated posts. The *Dryad* was at first under the charter to the Company but after the loss of the *William and Ann* she was purchased outright. This little brig of 200 tons is frequently mentioned in the journals of the day. In the spring of 1834 under the command of Peter Skene Ogden she left the Columbia on an expedition to the Stikine River in the far north carrying materials with which to build a fort on that river. Because of the opposition of the Russians in the area, however, the fort was not built until after 1839 when an agreement had been reached between the Hudson's Bay and the Russian government respecting trading privileges in the Pacific. The *Dryad* by this time had left the west for good. She carried the Columbia returns to London in 1836 and was later sold.

The Company's small schooners the *Cadboro* and the *Llama* had their share in the gradual wresting of the marine fur trade from both American and Russian competitors. In the erection of new trading posts at advantageous spots along the coast they carried necessary materials and later regularly collected the furs deposited at the posts by the native hunters. The *Llama*, a small schooner of 145 tons, had been bought at Honolulu in 1832 by Chief Factor Duncan Finlayson. Another schooner, the *Vancouver* built on the Columbia River, had a short career in the service of the Company. A mere 60 tons, she was found to be too small for successful trading along the hazardous sea lanes of the North Pacific. In 1831 she had been badly damaged at the entrance to Portland Canal. Three years later, on March 3, 1834, under the command of Captain Alexander Duncan, the *Vancouver* was wrecked on Rose Point at the extreme northern tip of the Queen Charlotte Islands. Captain Duncan who was in command of the vessel at the time was exonerated from all blame by the Company and placed in charge of the *Cadboro*.

The *Llama* continued to pay regular visits to the various trading posts. This sea-worthy little brig had originally come to the North Pacific as an American trading vessel in 1831 under the command of Captain William Henry McNeill. Though an American citizen, McNeill soon sold his vessel to the Hudson's Bay and entered the service of the Company. Later he was to command the steamer *Beaver* when that vessel arrived on the coast to take over the work begun by the sailing ships, brigs and schooners.

Fort George, formerly Astoria, at the mouth of the Columbia. From the "Illustrated London News" of February 10, 1849. Oregon State Archives





The Russian establishment at Sitka. From an unsigned, undated drawing in the H B C archives.

John Work, who was in charge of the Fort Simpson post for a number of years at this time, has left in his *Journal* a full report of a trading trip to the Queen Charlottes on board the *Llama* commanded by Captain McNeill. They left the west coast of Vancouver's Island on the first day of May, 1835, and after trading around Laredo sound, the ship stood across to Charlotte's Island and in the evening was off Cape James. From the Indians they traded 29 beaver, 16 land otter, 60 martens and 74 mink. No mention of sea-otter is made. By the 10th of May, in spite of baffling winds the *Llama* managed to make Skidegate Harbour. Here a number of canoes came off to trade fish, bearskins and some marten skins. It was noticed that the Indians seemed shy of coming on board and Work soon realized the cause of their hesitation. "Their shyness arose from the loss of the 'Vancouver' last year, as they are connected with the tribe who inhabit where she was lost, and who plundered her. . . ."

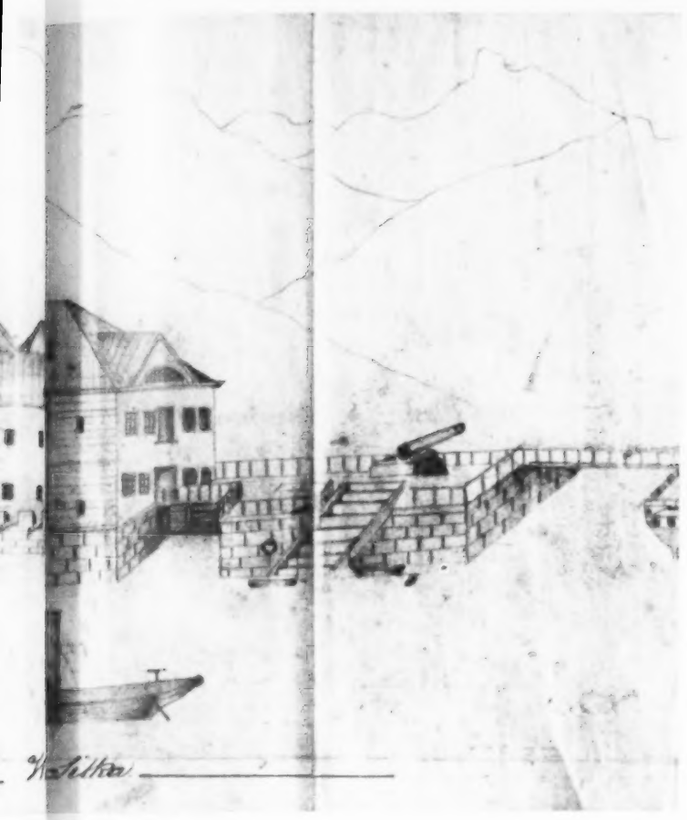
The people who did come to trade, however, informed Work that twenty-five canoes had gone to Simpson to try and make up for the wrong, and had also taken most of the furs, hence the scarcity of trade. The *Llama* therefore moved farther up the Sound to good anchorage and here they not only obtained some more furs but also bought some potatoes. Of this transaction Work says: "We paid higher than usual for [them] but they are scarce now and I much want these for seed at the fort . . . these people appear very poor . . . for this formerly used to be one of the best places for sea otters on the Coast, but now scarcely any is found among them. They grow considerable of potatoes, they have several patches under cultivation about their village."

The trade in potatoes with the Company posts, here mentioned for the first time, might be called the beginning of agriculture on northern shores. Dr. John McLoughlin, for long the head at Fort Vancouver, and under whose jurisdiction all the forts on the coast fell, wrote to John Work concerning the same matter as follows:

"I hope every means will be used to increase our intercourse with the Indians of the Queen Charlotte Islands, and it will be proper to purchase potatoes and whatever property they may bring to induce them to visit the Establishments more frequently, as we will be eventually the gainers by such a course. The potatoes cost a trifle, and provided they are not required at Fort Simpson . . . they may be sent to Stikeen if they could be procured in sufficient quantities to fatten pork, swine may be sent in by our spring ship from which you might breed and kill for exportation, casks being provided at Fort Langley for that purpose."

It is by such glimpses as this that we get a picture of how the Hudson's Bay Company adapted themselves to changing conditions. When furs fell off in numbers, they turned to other articles of trade, produce as well as manufactured goods, until the trading posts were stocked with a great variety of merchandise—forerunners of the department stores of the present day.

The Company's policy of encouraging the natives to begin the raising of crops was a natural outgrowth of Governor George Simpson's insistence that all the trading posts should be self-sufficient in the matter of food. A final outcome of the plan was the very astute arrangement entered into with the Russian government in 1839 whereby



the latter agreed to buy large quantities of wheat and other produce from the Company farms. They also pledged themselves to have all English or American goods required at their posts brought to them by Company ships. The development of large farms at Nisqually and on the Cowlitz River was an immediate result of this arrangement and the suitability of the surrounding area for agriculture was a deciding factor when the site of Fort Victoria was being chosen in 1843. Thus was American competition in the field largely crippled, for American vessels could not prosecute a profitable trade when deprived of the privilege of carrying goods to Russian posts. The Hudson's Bay Company at last held the supremacy in the marine fur trade of the North Pacific. To make and keep good relations with the native peoples with whom they had to trade was a thought never absent from the minds of all the commissioned officers at this time.

Of this endeavour the wreck of the schooner *Vancouver* is an excellent example. A letter of John Work to his chief, Dr. McLoughlin at Fort Vancouver reveals the Company's policy regarding such happenings:

"The natives [Tsimshians] have frequently inquired whether we don't mean to take some measures against the Indians [Haidas] who plundered the wrecked 'Vancouver' and enforce a restitution of the property or value of it. To this they have been returned evasive answers. From their conversation it appears that from the transactions at Stikeen last summer and the affair of the 'Vancouver' being overlooked we are much lessened in their estimation and our powers looked upon with very little respect. In order to remove this impression it would be highly desirable to take notice of the 'Vancouver' affair. Even should but little profit derive from it. But as we are situated at present, notwithstanding we have a crew of 20 able hands, except a very favourable opportunity, indeed, would offer, we would be able to make no impression on those plunderers, as we could not approach their village without much risk and exposure, and even then they could fly into the woods and evade us. Besides the goods are all since long dispersed, and even should a favourable chance offer we could gain little. We might recover the guns and chains but even that is doubtful without paying for them.

It is therefore probably the best plan to not notice the affair for the present, but wait for the arrival of the steamboat which with another vessel in company might perhaps do the thing effectually and be able to compel the Indians to make restitution of the property or value of it if they had any, but this tribe, the Massetts though powerful in numbers are very poor in furs of any kind."

Later in June, Work records the arrival of over 150 Massett Indians at Fort Simpson, and comments "... a most daring cut-throat set of scoundrels they are. A few came to the Fort gates and offered a few potatoes for sale—one woman brazenly tried to sell a tea cup belonging to the 'Vancouver'! The old chief, however, kept his distance, but through an intermediary he intimated that his tribe were willing to offer some beaver skins in payment for the wrong done should a vessel later come to Necoon [Rose Spit]."

The reference to the steamer *Beaver* at this point is of special interest. In the development and expansion of their marine fur trade it had long been realized by the officers of the Company that sailing vessels were severely handicapped by the many intricate channels which they had to navigate on the northern trading voyages. The London Committee of the Company decided to send out a steam vessel. In consequence the staunch little *Beaver*, the first steamer to enter North Pacific waters, arrived under sail at the Columbia River in March 1836, and soon began her work of carrying supplies and trade goods from the southern depots of the northern forts. For several years the official letters of the Company are full of orders and reports dealing with the "steamer" as the *Beaver* was always referred to. She visited all the Company's forts from Nisqually northward and carried James Douglas on his explorings to find a suitable site for a new post at the southern tip of Vancouver's Island.

The advent of the steamer probably helped to bring to a head a controversy of long standing between Governor Simpson and Dr. McLoughlin. The latter preferred trading posts to trading ships and had been the chief instigator in the building of the chain of posts along the whole sea board from the Columbia to distant Taku. Simpson, on the other hand believed that the *Beaver* at far less expense could do the work of several posts and as events proved won his point.

Simpson arrived at Fort Vancouver in August 1841 and very shortly after his arrival left on a seven weeks' tour of all the northern forts. His observations must have borne out his belief, for in November he wrote to headquarters in London: "The trade of the coast cannot with any hope of making it a profitable business afford the maintenance of so many establishments as are now occupied for its protection, together with the shipping required for its transport, nor does it appear to me that such is necessary."

Within three years three of the posts were abandoned—Fort Taku and Fort McLoughlin in 1843 and Fort Stikine in 1844. With the founding of Fort Victoria as the chief

depot of the Company, supplanting Fort Vancouver whose situation inside the dangerous Columbia bar, and what would be eventually American territory, made its retention as centre of the whole Columbian Department hazardous, the marine fur trade of the Hudson's Bay Company passed yet another mile-stone in its history.

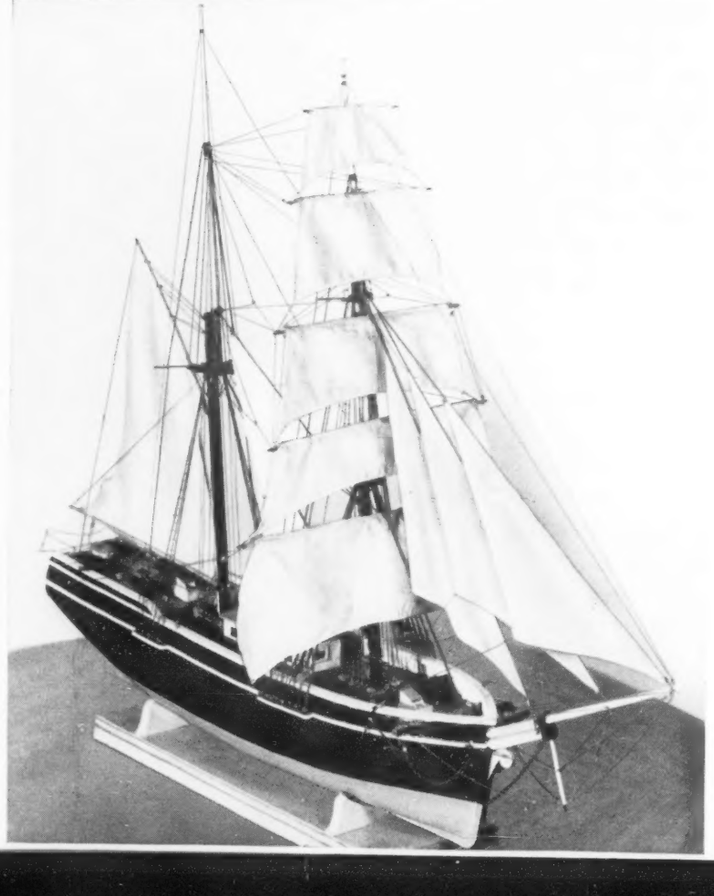
Before that came to pass the Company's servants and officers had still at times to face spirited rivalry in northern waters, from a number of both American and Russian competitors in the field. Nowhere was this more noticeable than in the traffic in rum or liquor which in the waning days of the fur trade became an ever-recurring source of friction, as did the sale of firearms as well.

A letter from Dr. McLoughlin to John Work, at Fort Simpson on March 13, 1837, expressed the Company's policy concerning the use of firearms in traffic with the native peoples.

> "You will proceed with the steamer with all despatch to Queen Charlotte's Sound and after clearing those Indians of all their skins you will hurry on to the residence of the Skit-kass tribe . . . in the course of the summer if possible to visit the canals of Queen Charlottes so that we may in case of opposition coming know what can be done in those places . . . if there is no opposition we ought on no account to sell arms or ammunition at Fort McLoughlin or Queen Charlotte Sound."

This reference to the sale of firearms is important for it illustrates the policy of the Company in matters relative to the welfare of the natives and the trade. It also recalls the long prohibition of the sale of spirituous liquors. The Hudson's Bay have often been accused of making a free use of liquor in their bartering with the Indians, but the accusation is in large measure false. When the force of the opposition made it imperative they did apparently use a limited amount of "fire water," as more than one trader admits. But most of the officers deeply deplored the necessity and would have gladly seen an end to the traffic. For liquor and trade simply did not go together. If the Indians had free access to rum they did not hunt. Then there were no furs to barter. Thus in the interests of the trade alone the Company would have sought at all times to curb the sale of rum. A letter from James Douglas, then temporarily in charge at Fort Vancouver, to John Work, three years after the proscription of firearms was made, shows this plainly. "I have it in command to direct that the sale of spirituous liquors be immediately discontinued at all our establishments while the most advisable means of doing so consistently with the safety and best interests of the trade are left entirely to your own approved judgment."

Model of the "Cadboro," by A. S. Coburn, in the H B C museum.

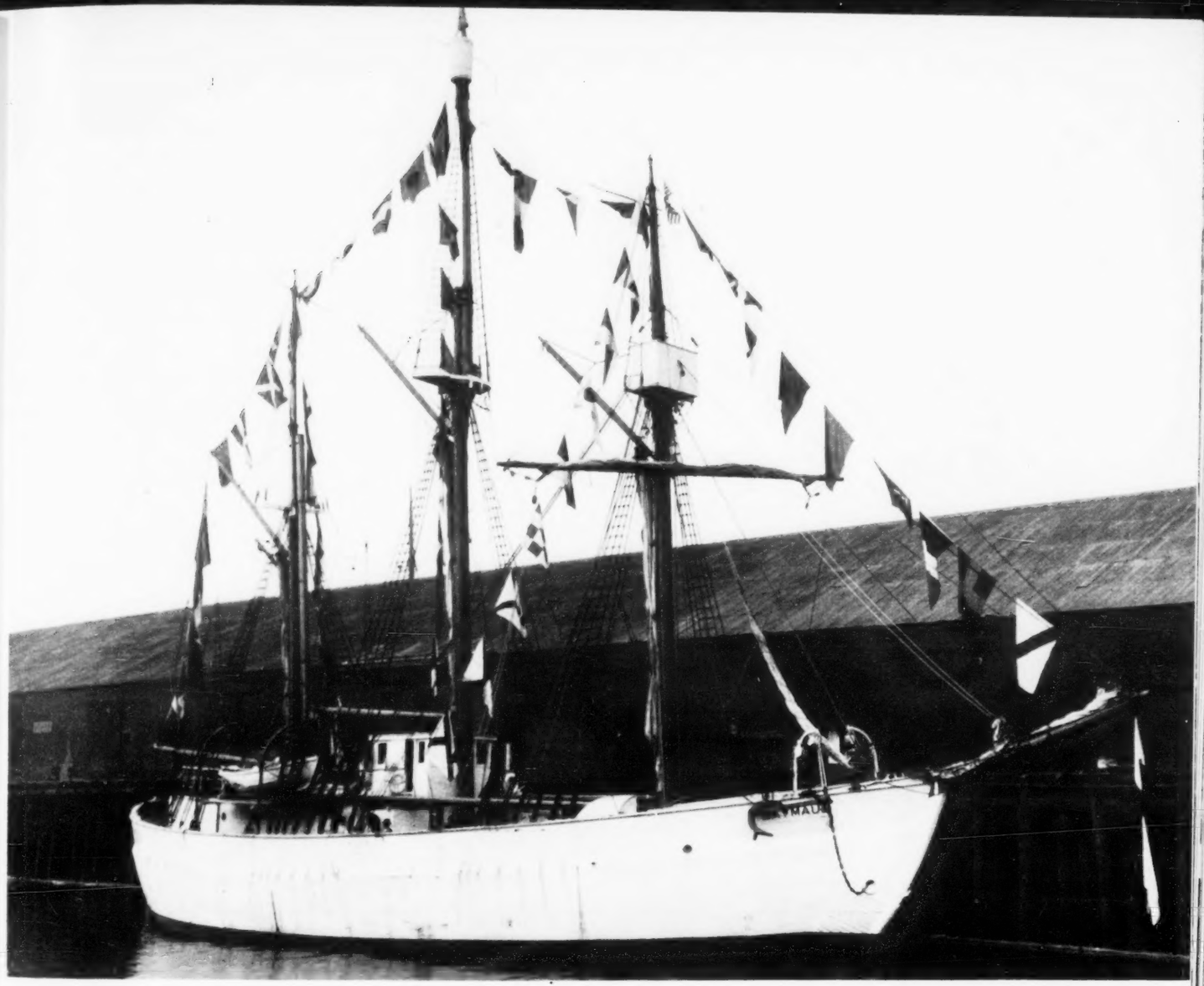


Actually the prohibition was to have an ill effect on the Company's returns. In the '60s the post at Fort Simpson experienced great difficulty in obtaining furs, as all the Indians demanded rum. When they could not get it at the fort they took their furs either to the Russian posts to the north or carried them to Fort Victoria where they claimed they could barter them for rum, evidently in "boot-leg" markets.

In the same period the Company's coastal trade suffered another loss on Rose Spit when in August 1854 the brigantine *Vancouver*, the third ship of that name to come to grief, was wrecked. She was a comparatively new ship, having only arrived at Victoria from England the previous May. Under command of Captain James M. Reid, the *Vancouver* went on the spit in a great gale and it was found impossible to float her. A messenger was sent to Fort Simpson, and Captain Dodd was despatched to the scene in the *Beaver*. Though the Indians claimed the wreck, Captain Dodd, no doubt recalling the difficulties arising from the loss of the first *Vancouver* at Necoon, drenched the doomed ship with oil and fired her.

The use of the *Beaver* in the northern waters was to continue for a good many years. It was found, however, that the trade in furs was falling off steadily. Most of the natives north of the fort at Simpson carried their furs to the Russians at Sitka as did many of the Queen Charlotte Islanders. On the whole as the years went on the Indians were peaceable but continued to say they regretted the loss of the rum at the Company's forts. They at times slyly lamented they had nothing with which to commemorate dead friends! Work, in a letter to his superiors before he left the service of the Company in the north, commented that no doubt they had less trouble with the natives since the use of rum stopped but that trade had suffered badly.

In the meantime the end of an era was approaching. With the coming of the gold rush in California and the later and lesser rush in British Columbia the emphasis shifted from furs to gold along the whole Pacific coast. With the establishment of civil government at Victoria and New Westminster the young British colony began its career. Based on sound principles of justice and fair dealings maintained through the difficult pioneer days of the maritime fur trade period by the Hudson's Bay Company's officers and men, the new colony had every chance to succeed.



"Maud" after she had been bought by the Hudson's Bay Company and renamed "Baymaud," dressed for the start of her last voyage into the Arctic. For scale, note the man's head amidships near the ventilator.
S. Thompson, "Vancouver Sun"

AMUNDSEN'S *MAUD*

by W. G. Crisp

Specially built to withstand the pressure of the polar pack, "Maud" ended her days as "Baymaud" at Cambridge Bay.

YOU are made for ice. You shall spend your best years in the ice and you shall do your work in the ice. With permission of Her Majesty the Queen I name you *Maud*." With these words the explorer Roald Amundsen shattered a block of ice against the bluff bow of a three masted schooner as she slipped down the ways into the waters of Oslo Fjord on June 7, 1917. For Amundsen, descendant of the Vikings who had inhabited the islands of the fjord for centuries, the ceremony marked the culmination of years of planning and the end of three years of frustrating delays occasioned by World War I.

The ship that had just been launched was the latest in a long line of wooden ships, from the Viking ships with their single square sails which had skirted the arctic ice pack a thousand years before and penetrated it to the fjords of Greenland and Baffin Bay, to the 400 ton *Fram* in which Nansen had drifted to 84° North in 1893-96, and the 74 ton *Gjoa* which, under Amundsen's command in 1906, had become the first vessel to complete the Northwest Passage.

Nansen had entered the pack north of the New Siberian Islands, but, after careful study of his drift, Amundsen had come to the conclusion that a ship entering the ice at a point further west would be carried closer to the Pole. This had been attempted by the *Jeannette* under De Long in 1879-81, but the expedition had ended in disaster, the ship being crushed in the ice northwest of Wrangel Island,

Mr. Crisp served for several years in the H B C fur trade, and from June 1926 to October 1929 was wireless operator on the Baymaud. *Now living in Vancouver, he is the author of* Ookpik, *an admirable book for young people about the adventures of an Eskimo boy.*

and only a few survivors had reached the Siberian Coast. Amundsen was confident that such a drift could be carried out in a ship capable of withstanding the pressure of the ice pack. Such a ship was the *Fram* which had already proved herself, and he was able to raise funds to equip her for a polar expedition in 1909. But instead of sailing to Bering Straits, the *Fram* was diverted to the Antarctic when Amundsen made his successful trip to the South Pole.

There were no poles left to conquer, but Amundsen did not give up his plans for a drift across the north polar basin, for it was his idea that valuable scientific data could be recorded by a small group of men, housed in a safe floating home, during the course of a three to five years' drift in the arctic ice pack.

By 1916 dry-rot had seriously weakened the *Fram's* timbers, and Christian Jensen was commissioned to design a vessel to take her place. The new ship was to be 20 tons lighter than the *Fram*, with somewhat shallower draft, and her midsection was to be semi-circular so that the ice pressure would lift her instead of crushing her.

Accordingly, although the *Maud* was only 120 feet long, she had a beam of 40 feet. Nothing had been overlooked in strengthening her hull; her ribs were a foot square at the keel and 'tween decks, tapering to 12″x8″ at the main deck. From every second beam, both in 'tween decks and main deck, diagonal struts (or "ice beams") were joined to the ribs with grown fir knees. Three solid thwartship bulkheads of 3″ planks gave her extra rigidity. A sheathing of $4\frac{1}{2}$″ oak was fastened to the ribs with oak pins. Over this was the ice sheathing, which was not caulked—oak from the keel half way to the deck and $2\frac{3}{4}$″ thick greenheart from there to above the water-line.

Her deckhouse, which contained a galley, a comfortable dining saloon and a laboratory, had individual cabins for each of the ten crew members, with sliding doors to conserve space. It was const ucted of 4″x5″ timbers, sheathed inside and out with heavy felt and $1\frac{1}{2}$″ tongue-and-groove. With double glass in the portholes the living quarters afforded complete comfort during the arctic winters. She was in fact a floating home rather than an ice-breaker, although even with her 240 h.p. Bolinder semi-diesel engines, which gave her a speed of about seven knots, she performed remarkably well in this latter capacity.

The *Maud* sailed from Vardo, Norway, on July 18, 1918, provisioned for five years. Normally the most expeditious route to reach the Bering Straits would have been to cross the Atlantic and enter the Pacific via the Panama Canal. But a loaded schooner would have been a sitting duck for German submarines, so Amundsen decided to take the Northeast Passage around the coast of Siberia. No great trouble was anticipated in negotiating this little-travelled route, but bad luck dogged the expedition from the start.

Ice conditions were exceptionally bad, and it was not until September 9 that they rounded Cape Chelyuskin, the most northerly point of Asia (77° 43′ N, 104° 17′ E). On September 13 the ship was frozen in between two small islands in an exposed bay that was named Maud Harbour. In November Amundsen slipped on the icy gangway and broke his arm. Before it had healed he was attacked by a polar bear with cubs, while he was walking through the pre-dawn darkness to the magnetic observatory on the ice a short distance from the ship. Luckily his dog drew the bear away and the wound he sustained on his back was only superficial, but he had been knocked to the ice on his injured arm with the result that he remained a partial invalid for the rest of the winter. He afterwards referred to this experience as the most terrifying moment in all his arctic travels. Later in the year, while making records in the laboratory, he narrowly escaped death by carbon monoxide poisoning and his heart seems to have been seriously affected.

It was not until September 12, 1919, that a lead opened up about a mile from the ship. The crew were able to work her out of the ice by blasting, and she proceeded eastward, leaving behind two men who were to take the scientific records back to Norway. These men were experienced travellers, they had equipment and food for a year and it was only five hundred miles to a Russian wireless station at Dickson Island. However, neither were seen alive again, and in 1922 the body of one was found by a Russian expedition within four miles of Dickson Island. It was a great blow to Amundsen as these were the first men to lose their lives on any of his expeditions.

As is often the case, one year of bad ice conditions followed another, and the *Maud* made such slow progress that she was forced to spend another winter on the Siberian Coast. Her winter quarters from September 1919 to July 1920 were at Ayon Island (69° 52′ N, 167° 52′ E) near Cape Shelasky. When the ice broke up she proceeded along the coast to Bering Straits and finally reached Nome, Alaska. Amundsen thus became the first man ever to have navigated both the Northwest and Northeast Passages. Here four of the expedition asked leave to return to Norway, reducing the crew by half.

Although the *Maud* was rigged with fixed gaffs, on which the sails travelled on runners, so that she could be handled by as few men as possible, a crew of four was still a very small one to sail a ship of her size. However, Amundsen turned her bow northward without delay. With him were Dr. H. U. Sverdrup, the scientist, who also acted as seaman, navigator and cook, Captain Oscar Wisting, and Olonkin as engineer. Heavy pack ice was encountered, even in Bering Straits, and the propeller was damaged so badly that the engines could not be used. But the four Norsemen forced their way through the ice under sail and reached Cape Serdze Kamen, about eighty miles west of East Cape, where they spent the winter.

In the summer of 1921, with the help of five Siberian natives who had never been on board a ship before, the *Maud* was sailed to Seattle. The three years spent in the Northeast Passage had been a severe setback and Amundsen was now beset with financial worries—the occupational hazard of most explorers. However, when he returned from Norway to Seattle in the spring of 1922, the future of the expedition looked bright. When the *Maud* sailed from Seattle on June 3rd she was outfitted for seven years and

The World north of the Arctic Circle, showing the whereabouts of places mentioned in this article.

equipped with modern observatory instruments as well as the latest type of English Marconi wireless apparatus. During her refit a large square sail had been rigged on the foremast, so that now, when viewed bows-on, she must have indeed looked like a Viking ship. But strangely out of keeping with this impression were the two planes she carried—a light Curtiss Oriole and an all-metal Junker. As early as 1909 Amundsen had suggested the use of planes on Arctic expeditions, he had learnt to fly in 1914, and now he was concentrating on plans to fly over the polar basin.

The *Maud* first called at East Cape to pick up sled dogs and to return the Siberian natives to their homeland. She then crossed to the Alaskan side and Amundsen left her at Point Hope. A short time later the Curtiss plane was put ashore and the Junker was transferred to a trading schooner bound for Point Barrow.

After all the planning and heartbreaking delays that had ensued since the keel of the *Maud* had been laid down in July 1916, Amundsen was not on board her when she finally forced her way into the polar pack. By August 8, 1922, she was fast in heavy ice in the vicinity of Herald Island to the westward of Wrangel Island. Captain Wisting was leader of the expedition, Dr. Sverdrup the scientific chief, and six other men, including the veteran Olonkin, made up the total crew of eight.

For a year she drifted westward in a zig-zag pattern occasioned by the changes of wind, until in September 1923 she had reached 76° 17′ N at a point just east of De Long's Island. It had been hoped that she would eventually reach Spitzbergen by a course more northerly than the *Fram's* drift. However, continuous northerly winds forced her as much as 100 miles south of this route. During the winter of 1923-24 the *Maud* drifted back and forth at about 75° N, and on February 17, 1924, Captain Wisting received a wireless message from Amundsen instructing him to come out of the pack. At first it was not thought that this would be possible, but late in the summer open leads appeared. On August 9, 1924, the *Maud's* engines were running again and she was under way between Bennett Island and the New Siberian Islands in 76° 29′ N, 143° 08′ E.

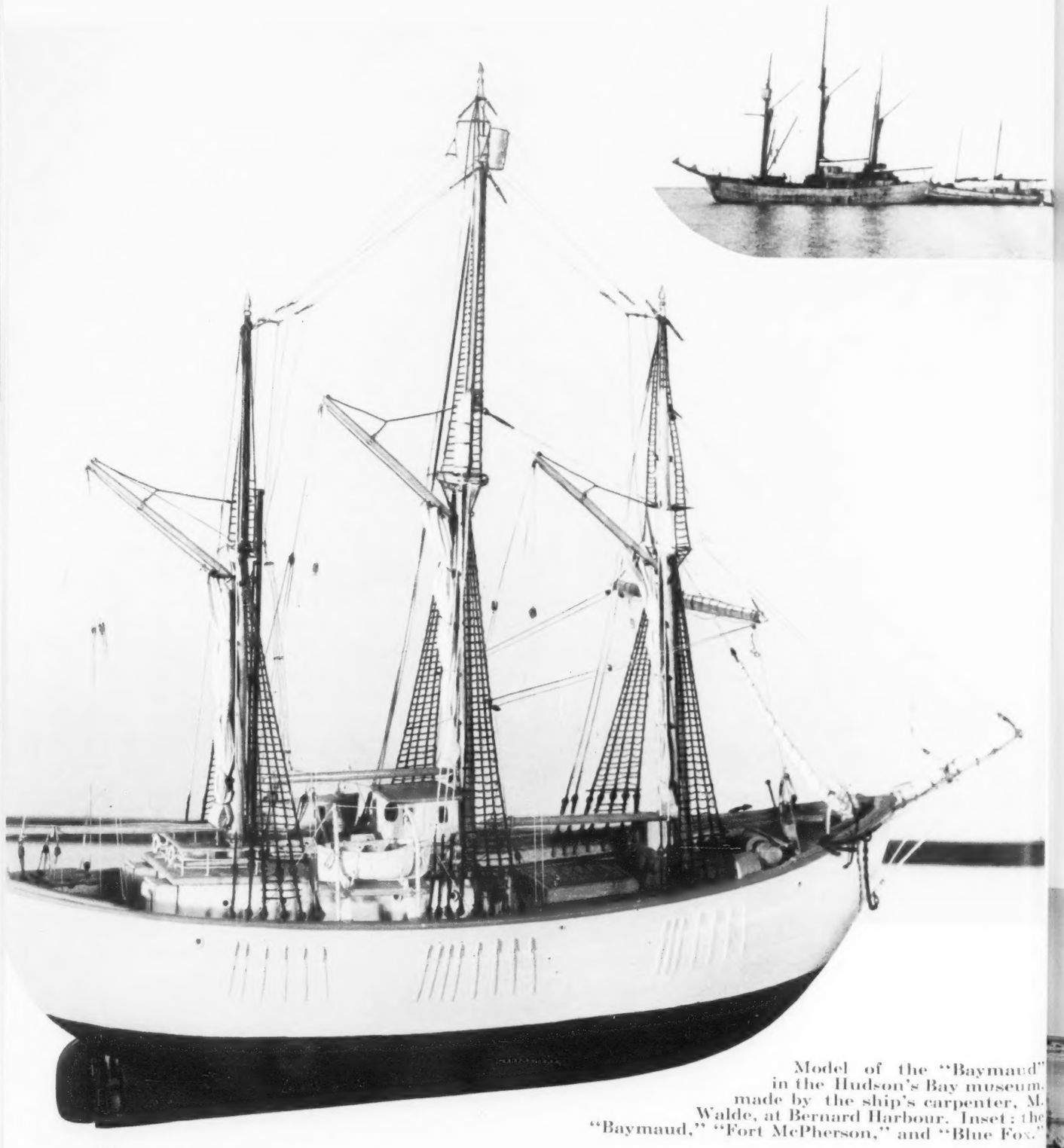
The *Maud* had been exposed to the full pressure of the ice pack for two years and had come through with flying colours. The ice had always slid under the rounded hull, lifting the ship as her designer had intended. Only once had the crew considered using the sleds loaded with supplies that were always kept in readiness—that was when a large floe had frozen to her starboard side, forcing it down until the water was level with her decks. But the pressure had eased suddenly and she was soon out of danger.

After extricating the ship from the grip of the main pack it was disappointing to all on board to find heavy ice along

the Siberian coast. As a consequence Captain Wisting was forced to winter about five miles from Four Pillars Islands (70° 43′ N, 162° 25′ E) off the mouth of the Kolyma River. The *Maud* was able to start eastward again on July 13, 1925, but because of bad ice conditions between Ayon Island and Bering Straits did not reach Nome until August 22, 1925. She had been away three years and two months but the farthest north she had reached was 76° 51′.

The scientific data recorded during the *Maud's* drift is contained in a 2,000 page report published in three volumes by the *Geofysisk Institutt*, Bergen. In connection with the meteorological observations made during the drift Amundsen wrote in *My Life as an Explorer** in 1927: "... the greatest advance likely soon to be made in the accurate prediction of day-to-day weather in the North Temperate

*Doubleday, Page & Co.



Model of the "Baymaud" in the Hudson's Bay museum, made by the ship's carpenter, M. Walde, at Bernard Harbour. Inset: the "Baymaud," "Fort McPherson," and "Blue Fox."

some will come from the erection and maintenance of permanent weather observatories on the north coasts of America, Europe and Asia. . . . I got some conception of how important such a chain of observatories could be by the excited gratitude of scientists that was aroused when twice daily wireless reports of the weather encountered by the *Maud* off the coast of Siberia were sent."

The ship reached Seattle on October 5. Amundsen by this time was mustering all his resources to finance an airship flight from Spitzbergen across the Pole to Alaska, and put the *Maud* up for sale. She was bought by the Hudson's Bay Company for use as a supply ship in the Western Arctic, and renamed the *Baymaud*.

Early in June 1926, loaded with a high deckload of lumber and case oil, she headed north for the last time. Her captain, the late Gus Foellmer, and most of her deck crew had been in the *Lady Kindersley** when she was crushed in the ice off Point Barrow in 1924. Amundsen had completed his flight across the Pole on May 14th, and when his old ship called at Teller, Alaska, for reindeer meat late in June, the aluminum skeleton of the dirigible *Norge* still lay scattered on the beach.

Ice conditions were fairly good in 1926. The *Baymaud* worked her way steadily through the dread Barrow ice pack which had claimed countless whalers as well as the *Lady Kindersley* and, five years later, was to swallow up the Company's steamer *Baychimo*. The engines were stopped for less than twenty-four hours, and even that time was not entirely wasted because it afforded an opportunity to refill the ship's tanks from fresh water pools on the old floes. Little ice was encountered in the Beaufort Sea and, after brief stops at Herschel and Baillie Islands, the ship proceeded to Coronation Gulf. Here she unloaded supplies at Bernard Harbour, Tree River, Kent Peninsula and various outposts. However, the farther east she sailed, the more apparent it became that she was not suitable for navigating the shoal waters of this section of the district.

The original plan had been to establish a new post, to be called Fort Harmon, on the southwest coast of Victoria Land where the *Baymaud* was to winter. But, on arrival early in September, Captain Foellmer found that the anchorage did not afford adequate shelter, so the building materials and supplies were landed and Ian MacKinnon, who had been acting as purser, remained in charge with a seaman to help him with erection of the buildings. With slush ice forming in the bays, the *Baymaud* crossed Dolphin and Union Straits to the shelter of Bernard Harbour. The captain's judgment was dramatically vindicated before freeze up when a southerly gale filled the anchorage at Fort Harmon with heavy pack ice.

All that remains of the sturdy "Maud," as it appeared last summer at Cambridge Bay.
Don Blair.

During the winter at Bernard Harbour, M. Walde, the ship's carpenter, made an accurate scale model of her which is now in the Company's museum at Winnipeg. Even a casual study of this model will give one some idea of how, with scarcely an open lead in sight, the *Baymaud* was able to break her way through the ice of Coronation Gulf in mid-August 1927. She called at Kent Peninsula to load the building material and trade goods from that post, which was being abandoned. She then sailed as far east as Perry River and returned to Cambridge Bay where a new post was established. The *Baymaud* was moored securely in a nearby cove and most of her crew were taken out in the *Baychimo*.

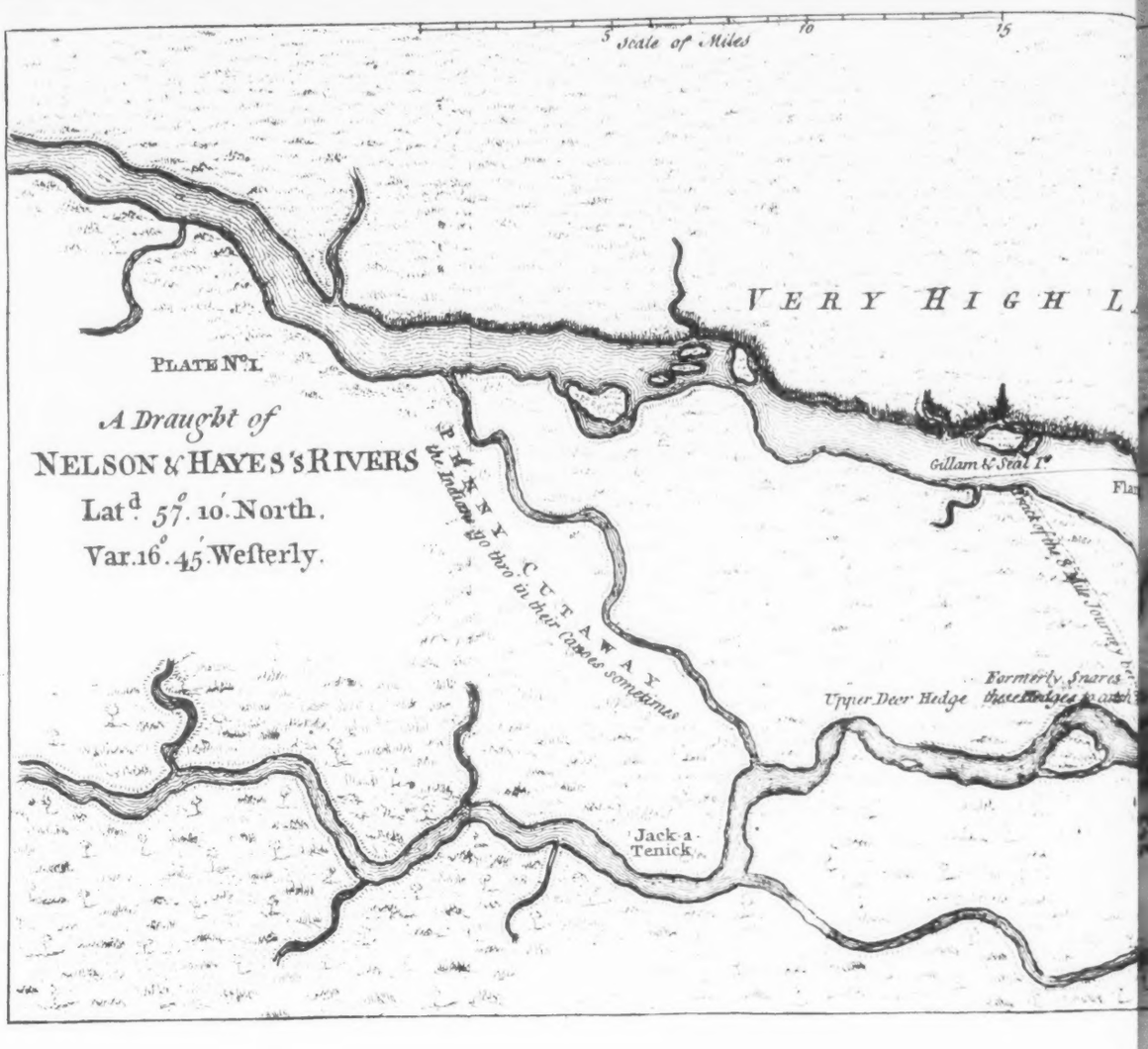
From then on the *Baymaud* was used as a floating warehouse, machine shop and wireless station. Weather observations were sent out twice daily through the R.C.C.S. Mackenzie network which were the first regular winter reports by radio from Canada's arctic coast. The Department of Transport established stations in Hudson Strait in 1928 and at Coppermine in 1929, but Amundsen's dream of a chain of weather stations around the Pole was not to be fulfilled for almost twenty years.

In 1930 the *Baymaud* developed a leak at her propeller shaft which could not be repaired without docking facities. She sank at her moorings and became a complete wreck. Such was the prosaic end of what was undoubtedly the last wooden ship that will ever be built for drifting in the polar pack.

Baymaud, ex *Maud*, represented a strange paradox. Neither the *Maud* nor her crew had failed in any way, but no one in the air-minded late twenties was interested in further expeditions using the slow system of drifting with the ice. Twenty years later, after military and commercial flights over the arctic pack had become routine operations, attention was directed to the advantages of safe floating bases drifting in the polar basin. The establishment of such stations became possible upon the discovery after extensive aerial reconnaissance, of the now familiar "ice islands."

In March 1952 the U.S. Air Force made the first landing on one of these "islands" which was designated as T3. On July 31, 1950, T3's postion was 75° 24′ N, 173° 00′W—less than 300 miles from Point Barrow. The *Maud* on September 14, 1922, had reached 72° 24′ N, 170° 46′ W. On a clear day one could see a long way from the *Maud's* crowsnest, 100 feet above the waterline. If ice conditions had been more favourable in 1922—if the *Maud* had been able to force her way a few more miles into the pack—it seems possible that her wireless might have sent a report to Amundsen at Barrow of the sighting of one of the "ice islands." If this had happened thirty-three years ago it would undoubtedly have changed the history of Polar aviation. ◆

* "Lady in Distress," Beaver, June 1951.



York Factory 1714-1716

by T. E. Tyler

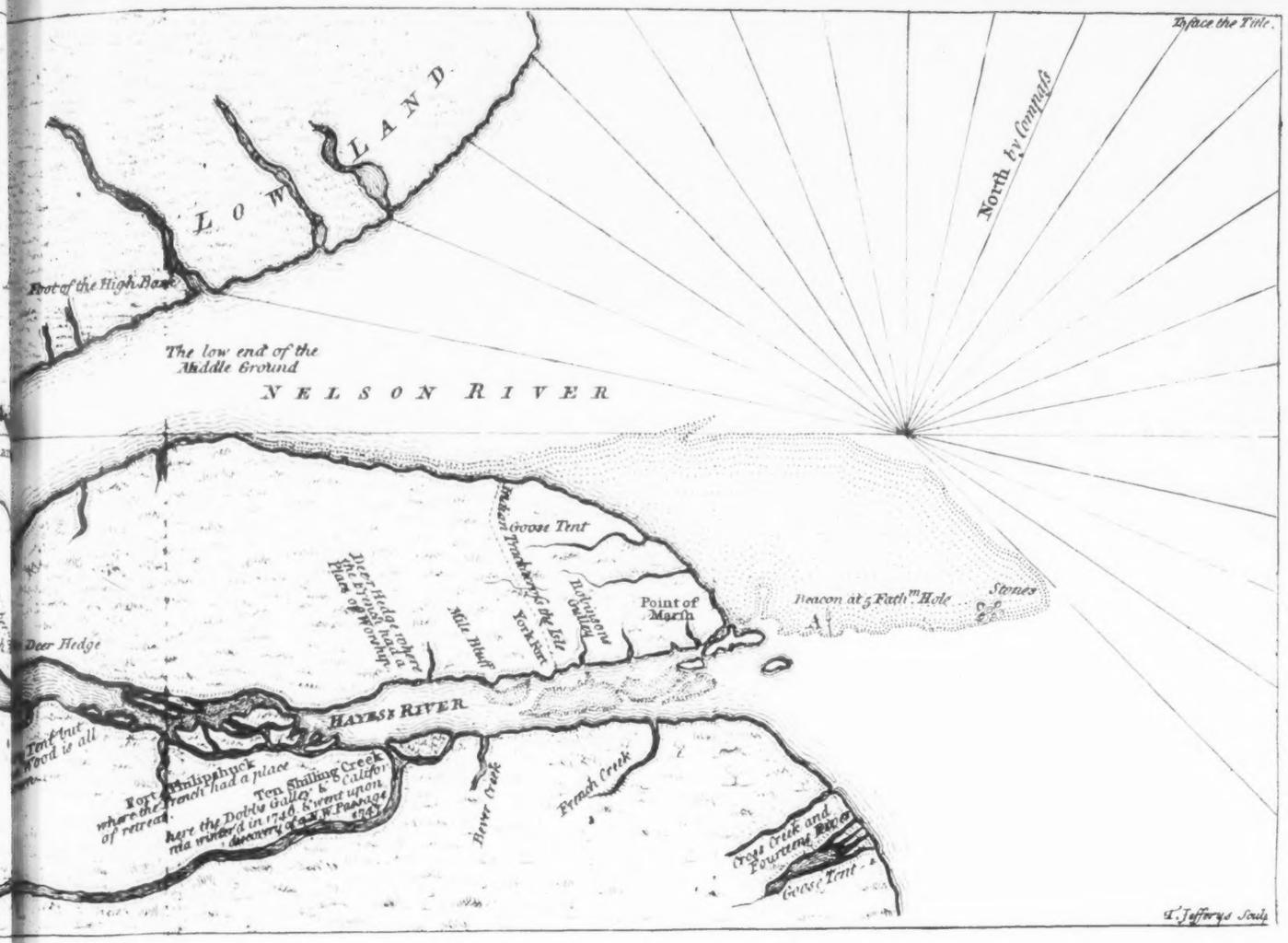
"The said most Christian King shall restore to the Kingdom and Queen of Great Britain to be possessed in full right for ever, the bay and streights rivers and places situate in the said bay and streights, and which belong there-unto no tracts of land or of sea being excepted, which are at present possessed by the subjects of France. . . ."

SO ran the tenth clause of the Treaty of Utrecht 1713, which closed the first round in the struggle for possession of the Bay; a struggle which was not finally decided until the Treaty of Paris in 1763. The Hudson's Bay Company, since 1697, though reduced to one post, Albany, had clung grimly to its possession and its rights and was now receiving a just reward.

Through the minutes of the Committee meetings for 1714 there can be felt running the current of excitement arising from the Company's longed-for success. James Knight was proposed as Governor of Port Nelson, and as such he was to accept the French surrender. The Company's elation may be measured by their acceptance of his eight points which included a salary of £400 per annum; a share in the profits of any new trade in furs, minerals, oil and bones; a fur coat, a beaver coat and any presents which the French chose to give him.

Knight duly set sail and on his arrival on Sept. 5th, 1714, the ceremony of taking possession of York Factory was conducted without incident. The French, before departing, sold their remaining provisions to him, a purchase which later was to prove of great value. The Company servants were unfortunate in that they had arrived in September, when the all too brief summer had almost ended, leaving them very little time in which to prepare for winter. For the fort was in a sorry plight, and Knight, when writing to Governor Beale at Albany Fort later in September, painted a very gloomy picture: "I found the fort in a most miserable Condition all Rotten & Ready to fall not Scarce Defenceable against ye Natives if they have a mind to Assault. neither is it to be Repaird any other way but by building another wch cannot be done

Mr. Tyler is a student at the graduate school of history, University of London.



This map of the country around York Fort—seen on the north side of the Hayes River an inch from the eastern extremity of the Point of Marsh—is taken from Robson's "Account of Six Years' Residence in Hudson's Bay." He was at York between 1745 and 1748.

where this Stands for the banks of the River are Washed away to ye Undermineing of the House & Flankers [Bastion's] sides. . . ."

But, for the coming winter, Knight had no alternative to patching up the existing building even if its walls were "as soft as wet bread." The men therefore set about taking down the sides of the old house and putting up planks and slabs, between which they packed earth. Thus they settled down to the numerous tasks which were so necessary for that time of the year. Stores were put away, the malt going into the cellar. An oven was built, a garden staked out, a smith's shop fitted up and beer brewed. The garrison kept their "eye in" by shooting at a mark and by hunting. Wood was chopped for winter fuel and grass was cut for the animals. In the meantime hands were abroad locating suitable trees, cutting timber and squaring it in readiness for the building of the new fort.

So the winter passed, with the customary good cheer and extra rations at Christmas and other festive seasons. Then on May 7, 1715, came the first major setback which was to be but the forerunner of a series of mishaps leading to hardship and despondency. The garrison were completely unprepared for the breaking of the ice, and the floods which always followed, when the river thawed inland before the mouth was free. Knight had sat down to dinner when the water came flooding in, forcing the garrison "to leave the Factory & betake our Selves to the woods and gett on Trees & Stages the Water Rising above nine foot upon the land & continued up for Six Days, wee looking every minute when ye Factory would be tore to pieces. The Ice lay heap'd & crowded at least 20 foot higher yn [than] the Factory. . . ."

The loss in livestock and provisions was considerable, but Knight immediately set his plans for the rebuilding of the fort. In the meantime the wrecked fort was patched up as a temporary residence.

The daily routine tasks were therefore extended to include the repair of the flood damage. The garden was once again railed off, dug and sown. Some geese were shot and fish caught. A light palisade was erected and hung with the cook house door, the old gates of the fort being too heavy for such a light structure. While some men cleaned out the lower rooms and the yard, others were kept busy cutting and squaring timber for the new building. Before laying the four-foot beams under the foundation of the new house, the men dug a cellar, and by August 19, two months after the foundations had been laid, they had built the two-storey dwelling house as high as it was intended. By the end of the month the ground was set for the moat surrounding the house and flankers so that the men could

raise the ground about the house to protect it from ice and the flood. September came and winter drew on apace. To Knight's chagrin, no Company ship arrived with fresh stores and trading goods, and he was faced with a winter of limited rations. The fourteen bushels of turnips dug from the garden were therefore a welcome addition.

By this time, it had been decided to dispose of the sheep and goats which Knight considered unsuitable for that country; for, according to him, in winter they froze, and in summer they were eaten full of holes by the flies. They never attained a size which would warrant the labour involved in feeding them, nor the danger inflicted on the fort by the absence of so many of the garrison during the hay-making season.

Meanwhile the Governor had not been neglecting his primary duty of encouraging trade and had been endeavouring to contact the Northern Indians, or Chipewyans. William Stewart, with an Indian chief and a "slave" woman, had returned after a hazardous but successful journey to their territory, and had brought back ten natives whom Knight planned to train as interpreters for what he had hoped would be the great influx of Northern Indians in the coming summer, bringing with them what he firmly believed to be the most valuable furs of all the trade. (See *Beaver* Dec. 1952, p. 42.)

However, in spite of this success, Knight, owing to the shortage of trade goods, especially powder and guns, was faced with failure. By the end of May the Indians had become discontented and insolent. In view of their threatening attitude all work was now at a standstill, and the men unable to venture abroad to get timber. This tense situation lasted a fortnight and was eased for a little while only with the departure of the Indians. The relief, however, was short-lived. Indians still arrived from even further afield. Knight calculated that some had taken twenty-eight days to come down-stream and would take three months to get back home. These "Upland Indians" had not been down for fifteen years and were keen on trade. Some had even come without their bows and arrows in anticipation of the guns, powder and shot that they hoped to receive. Now they were in a quandary, for if they awaited the arrival of trading goods, their families might starve; but if they attempted the return journey immediately, without weapons, they themselves might perish.

The garrison was in a desperate situation. Its defences were still to be completed, powder was low and the Indians hostile. The servants were forced to remain in the vicinity of the fort and were unable to hunt for fear of enraging the Indians by a display of powder which, they had been told, did not exist. Knight was also chary of cooking, for the smell might rouse the natives who were in such desperate straits. Some had not eaten for three days, many were nothing but skin and bones, and several lay down before the fort to die.

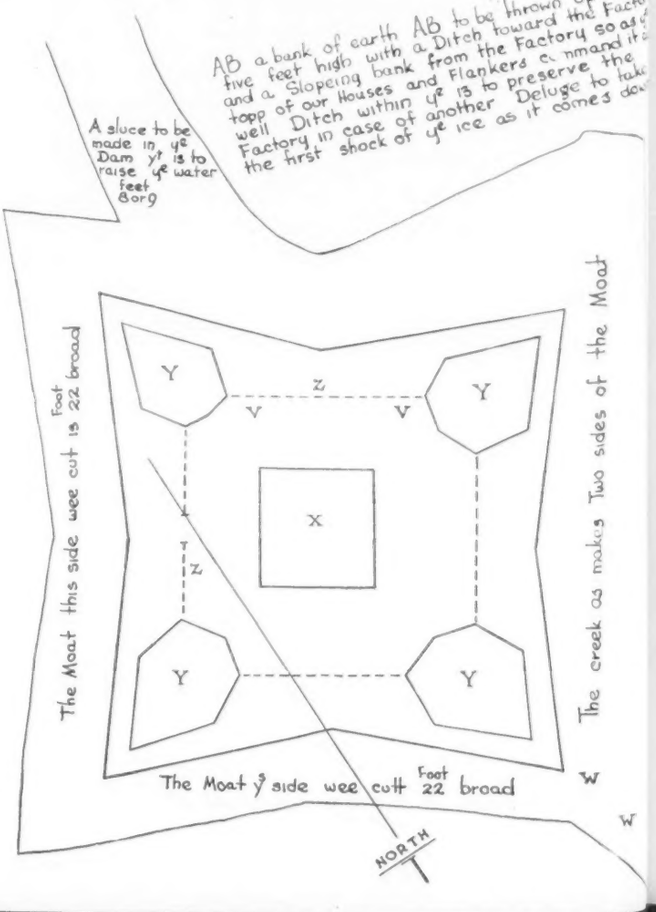
By August 12 all the spare food was used up. A check on remaining provisions showed that the possible weekly rations which could be issued to eke out yet another year should the ship not arrive, was two and a half pounds of flour and a pint of peas per man. The situation was still worsening. The Home Indians warned Knight to keep his men near the fort to prevent an attack on them by the Upland Indians. Especially boastful were a band who had successfully attacked the French in 1712, killing several of them and destroying a quantity of stores. These were now threatening a similar attack on the English.

Desperately Knight made his last bluff. He informed the natives that a ship was expected in ten days, and on its arrival all would be well. This measure was imperative, for there were now over one thousand Indians in the area, lying for over a hundred miles up the river; and the fort was yet to be enclosed. What relief then must have been felt by the whole garrison when on August 31, the palisade was completed and the fort enclosed.

Three days later their faith was fully justified. The firing of guns out to sea denoted the arrival of a ship, and when the fog lifted the following day the arrival was identified as a Company vessel. The Indians went wild with delight. They pranced along the river banks shouting and yelling, and late into the night the celebrations continued in the light of leaping fires and waving torches.

Knight and his small garrison had passed through two critical years in the re-establishment of York Factory. They had learned their lessons through the hard way of experience, and Knight, in his Factory Journals, did not fail to record the difficulties and hardships they had endured, so that the London Committee would take steps to guard against their recurrence.

Copy of Knight's 1716 plan of York Fort showing the new factory. X is the dwelling with warehouse on top; Y the flankers or bastions; Z the palisade. WW shows where "the ice drove and never stopt."


AB a bank of earth AB to be thrown up AB five feet high with a Ditch toward the Factor and a Slopeing bank from the Factory so as y topp of our Houses and Flankers commands it well Ditch within ye is to preserve the Factory in case of another Deluge to take the first shock of ye ice as it comes dow
A sluce to be made in ye Dam yt is to raise ye water feet Borg
The Moat this side wee cut is 22 broad Foot
The creek as makes Two sides of the Moat
The Moat y side wee cutt 22 broad Foot
Y
Z
X
W
NORTH

BAFFINLAND ADVENTURE

What actually happened to the two men lost on Baffin Island last winter.

BY the time this number of the *Beaver* appears in print, the story of the two men lost on Baffin Island will have been forgotten by most people who read about it in the newspapers last February and March. Nevertheless, there was a great deal published about it, and through our press services we received over 75 clippings. All in all the story became pretty fanciful. As always, the farther from the scene, the greater the fancy. The terse telegraphic message reproduced here tells the actual story.

From this it will be noted that the two men, Donald Baird and his guide Ootochie, left Cape Dorset on January 25, not the 15th as all the press reports stated, so that they were absent 37 days, not 47. Moreover, the route from Dorset to Frobisher is 300-350 miles long, not 750. The report that they shot and ate five of their dogs was slightly exaggerated. They shot one for *dog*-feed, and four others died of starvation.

From a wild guess by somebody that the dogs *may* have been attacked by wolves, one writer jumped to the conclusion that the men had been attacked by a hungry wolf pack, and said so. One night, it is true, a lone wolf did disturb the dogs' slumber.

Contrary to many of the printed reports, Baird was not a novice in the Arctic, neither was this his first dog-sled trip. He was serving his fifth year up there, and had done considerable winter travel.

The fact that the two men were lost does not reflect on the efficiency of the Eskimo guide, Ootochie (ch as in "loch"). Nobody can see through a snowstorm unless he is equipped with radar, and Ootochie had carelessly left his radar set in his igloo. The two Eskimos who left Dorset on February 17 to look for the missing pair were themselves lost for two days. Arctic weather is still the great hazard, as it always has been. As the Halifax *Chronicle* said in an editorial: "Like untold hundreds who had survived the bitterest onslaughts of the Arctic over the centuries since Charles II gave a charter to 'The Governor and Company of Adventurers of England trading into Hudson's Bay,' the two employees of the same company had fought their way back to safety on foot."

The route usually taken between Cape Dorset and Frobisher Bay in winter is shown by the heavy line.

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OOTOOCHIE AND BAIRD DEPARTED DORSET JANUARY TWENTY FIFTH ASSISTED BY ASHAVAK STOP ARRIVED POOTOOGOOKS EVENING TWENTY SIXTH PUDLAT JOINED THEM TO ASSIST ASHAVAK TWENTY SEVENTH THEY PROCEEDED INLAND TO CHORBUK INLET TWENTY EIGHTH PROCEEDED INLAND TO MINGO LAKE ARRIVED MINGO THIRTH FIRST GOING VERY POOR SOFT SNOW FEBRUARY FIRST DEPARTED MINGO FROBISHER BOUND ASHAVAK AND PUDLAT LEFT THEM NOON RETURN DORSET OOTOOCHIE AND DON PROCEEDING ON DOGS IN GOOD SHAPE SECOND CLEAR GOOD GOING SLEPT FAR SIDE AMADJUAK HILL

THIRD GOING VERY POOR SOFT DEEP SNOW DRIFTING HARD WIND CHANGING UNNOTICEABLE CAUSED THEM TO U MAKE LARGE CIRCLE SUN INVISABLE FOURTH WIND CHANGED AGAIN THROWING THEM WELL OFF COURSE THOUGHT THEY WERE TOO FAR SOUTH BUT ACTUALLY TOO FAR NORTH RUNNING LOW ON FUEL DOGS PAWS FREEZING FIFTH SNOWING DENSELY WIND CHANGED DIRECTION CAUSING THEM TO MAKE ANOTHER CIRCLE SOFT SNOW TWENTY INCHES DEPTH CAMPED ON SIDE OF SYLVIA GRINNELL LAKE SIXTH SLEPT OUT THE DAY WEATHERTOO POOR TO TRAVEL STARTED RATIONING KEROSENE TO HALF PINT PER DAY SEVENTH CLEARED UP CONSIDERABLY COULD NOT FIND EITHER OF THE TWO RIVERS WHICH RAN FROM GRINNEL TO FROBISHER BAY WRONG LAKE COMPLETELY LOST EIGHTH TRAVELLING THROUGH HEAVY ROCK PILE TRYING TO STRAIGHTEN THEMSELVES OUT NO LUCK NINETH CLEAR DAY

DISCOVERED THEY WENT NORTH LAKE AMADJUAK FROM HIGH MOUNTAIN SIGHTED MINGO HILLS MANY MILES SOUTH HEADED FOR THEM TENTH BLOWING HARD SLOW GOING NO DOG FOOD LEFT ELEVENTH DRIFTING HARD MADE LITTLE PROGRESS ONE DOG PERISHED TWELFTH DOWN TO BISCUITS AND TEA RATIONED BISCUITS FOUR PER DAY PER PERSON SIGHTED CARIBOU BUT FAILED TO GET ANY DOGS IN VERY POOR SHAPE SHOT ONE FOR DOG FOOD THIRTEENTH ARRIVED MINGO LAKE SNOWING DOGS CANNOT GO MUCH FARTHER FOURTEENTH FOUND PETERS CARIBOU CACHE CONTAINING

TWO CARIBOU WHICH SAVED BOTH THEMSELVES AND DOGS FI HEAD FOR PETERS CAMP WEATHER EXCEPTIONALLY POOR DOI MILES DAILY SIXTEENTH PROCEEDING SLOWLY SEVENTEENTH KOROK INLET CARIBOU MEAT ONLY FOOD LEFT NOW USING L FLUID IN PRIMOS LASTED TWO DAYS EIGHTEENTH BURNING WEATHER MISERABLE NINETEENTH TO TWENTY THIRD PROCEE SLOWLY DOWN KOROK INLET THREE MORE DOGS PERISHED SL OUT TWENTY FIRST TOO BAD FOR TRAVELLING OOTOOCHIE F TOES AND FINGERS ON TWENTY THIRD TWENTY FOURTH SNOW ARRIVED PETERS CAMP DOGS AND THEM EXHAUSTED RE THERE RECOVERING UNTIL TWENTY SEVENTH WHEN THEY SET FOR DORSET WITH TWO TEAMS FROM CAMP TWENTY EIGHTH BA FROZE FINGERTIPS MARCH FIRST MET SECOND RESCUE TEAM POOTOOGOOKS WHICH BROUGHT THEM TO POST MARCH SECOND PEYTON

Nor must the part played by the two air forces be glossed over lightly. The air search was started by the R.C.A.F. on February 12, and the next day was joined by the U.S.A.A.F., while all planes of the Maritime Central Airways flying the Goose Bay-Frobisher route were alerted. Goose Bay Air-Sea Rescue sent two Dakotas to aid in the search, and most of the aircraft were flying from 9 a.m. to 3 p.m., when darkness descended. At Frobisher base, temperatures of 35° to 50° below zero often complicated operations, but by February 27 the whole area from Mingo Lake to Silvia Grinnell Lake, 50 miles deep, had been completely covered by the pattern known as "creeping line ahead."

Radio helped greatly too, and the search team sent out from Dorset carried a receiving set on their *kahmotik*, through which news was received every night at 9 from the managers of the posts at Dorset and Frobisher. ♦

The radiogram tells the true story. Below: Ootochie is on the left of this picture taken near Cape Dorset. The dogs are looking for a seal that has escaped through a tide-crack. R. Thierry

Eskimos Adrift

Despite all the new gadgets which have found their way north in recent years, weather is still the great arbiter of northern travel, and men who venture out into it are still subject to its tyranny. In the same month that saw the departure of Donald Baird and Ootochie from Dorset for Frobisher Bay (p. 51), nine Eskimo men left Cape Smith, off the northeast coast of Hudson Bay, to go seal hunting at the floe's edge. They planned to be away for the hours of daylight only. But they did not return to camp until eleven days later.

The report forwarded to Hudson's Bay House by the manager of the post at Povungnetuk states that, due to bad ice along the floe edge, the men had to leave their dogs behind, close to land, and proceed on foot, pushing two sleds with kyaks on them to the water's edge. As there was very little snow on the ice to melt for tea water, they did not take their primus stoves.

They had shot only two seals when the wind got up, and before they could get back to solid ice near the shore, the thin floe on which they stood broke off and started moving out to sea. That night they did not sleep. They had meat, but no water, and no shelter. For the next two days a blizzard raged, and finally on the fourth day they decided to burn their sleds to get a little water from the snow. That day, too, they saw Mansel Island, 70 miles from Cape Smith, off to the northwest.

On the fifth day they shot three seals and finished burning their sleds to get water. Then they started out to walk across the ice to camp, leaving their kyaks behind. The next day was an especially miserable one, with neither food nor water. For three nights they had had no sleep, but though there was no land in sight, they kept on walking. At last on the eighth day they reached the Kovik River, 70 miles north of Cape Smith, and were able to get all the water they wanted, though they were still without food. And the same conditions prevailed on the next day.

Meanwhile, Cst. Parsons of the R.C.M.P. had been searching for them, and that night they walked right past his igloo, only 100 yards away, without seeing it—as he discovered from their tracks next morning.

Altogether, the men survived their ordeal in good shape. Though they had no change of clothing, none suffered from frostbite, and they probably took the whole thing in their stride, as they and their ancestors have been doing for many centuries. In passing, it is of interest to note that one of these tough *hombres* was described in the report as "Simon, the carver and artist." A drawing of his appeared in the Autumn *Beaver* last year.

Davy C. and Davy T.

The current mania for Davy Crockett songs, stories, television shows, costumes, etc., has caused two history professors of the University of Toronto to lament, via the columns of the daily press, that we Canadians glorify the frontier swashbucklers south of the border while paying no attention—outside the classroom—to our own heroic pioneers. It seems that, in North America, such adventurers are not worth immortalizing unless they go about killing people, chiefly Indians. The two professors mentioned ten Canadian frontiersmen "whose derring-do matches or excels that of the famous Crockett," and their list included six western fur trader-explorers whose dealings with the Indians were notably peaceful—Groseilliers, Radisson, Kelsey, and Henday of the H B C, and Sir Alexander Mackenzie and David Thompson of the N.W.Co.

Considering that such stalwarts as these, and others such as Ogden, Hearne, Thomas Simpson, Dr. Rae, and Robert

Campbell, are our own countrymen of whom we have good reason to be proud, one wonders why we ignore them in favour of such doubtful characters as Kit Carson, Jesse James, and other gun-toters, outlaws, and "tough-guys" who are celebrated in song, story, and film.

Toughness of the right kind is an admirable quality in men; but it has been our experience that the really tough characters—the men who can "take it," like the nine Eskimos referred to in this packet, and other northern men of our acquaintance whom we could name—are almost always of the quiet, diffident type, who consider that acting tough in order to impress others is merely ridiculous—an adult manifestation of small children playing cowboys and bad-men.

Wanted, 500 Tomahawks

Sometimes we get the curiousest requests sent to this office—which does double duty as the editorial hideout of the *Beaver* and the correspondence branch of the Company's museum. The latest was a letter from a Chicago firm addressed, with no return address, to "The Hudson Company, Winnepeg, Montreal" (congratulations to the Canada Post Office for delivering it without twitching an eyelid), and reading as follows:

"Gentlemen:

"The Chicago Historical Society has on display an Indian Tomahawk which is illustrated in the accompanying photograph. As our company is engaged in the display business, we are anxious to obtain a quantity of these weapons.

"The accompanying caption states that approximately 14,000 of these tomahawks were sold to the North American Indians over a period of some 200 years. We can conclude that the Hudson Bay was the supplier mentioned.

"We are therefore willing to ask if you have in Winnepeg or in your head offices in London, a quantity of these tomahawks or the original molds from which they could be made.

"As our sales contacts cover the entire U.S., it is possible that we would require from 300 to 500 tomahawks. If you can give us any information as to their availability, cost and delivery, we would be very pleased to hear from you."

They heard from us.

Great Lakes to Greenland

Travellers on the Great Lakes whose experience with ships has been limited to the ocean-going variety, are often amazed at the way the great ore carriers, 600-700 feet long, are brought up alongside a wharf with apparent ease and no help from tugs. Especially is this noticeable at the locks, where it looks as if there are only inches to spare on either side as the long ships glide between the high stone walls and stop just short of the gates. (Once, long ago, a certain passenger steamer still operating on the Lakes did not stop, and crashed through the lower lock gate at the Canadian Sault, with disastrous consequences to the laden ore boat astern of her. But that is another story.)

An old sea-dog of our acquaintance gave it as his opinion some years ago that the Great Lakes mariners were "wonderful ship-handlers but not much use as navigators." But if he had lived to see some of the lake boats in action during the last war, he might have changed his mind.

In 1941 there was such a shortage of ocean shipping, and Greenland cryolite was so desperately needed for aluminum, that a number of "canallers" of the Paterson Steamships Ltd. were pressed into service between Port Alfred on the Saguenay, and Ivigtut. A former Canadian consul in Greenland, who told us the story in lighter vein, reported that the captains' instructions were to proceed into the Gulf of St. Lawrence, and after passing through the Strait of Belle Isle between Labrador and Newfoundland, "take the first turning on the left and keep straight ahead."

By following these sailing orders, the first lake boat approached Greenland. And the story went on to state that an Eskimo at Ivigtut, seeing this strange craft, with its high superstructures fore and aft, approaching hull-down over the horizon, hurried in to report that not one, but two ships were in the offing.

All in all, Operation Cryolite as carried out by the "doc" boats of the Paterson line was a huge success, and although two of the little canallers were at sea during one of the worst storms of modern times in that area, they both arrived at Port Alfred, battered but safe, with their cargoes intact.

So much for the theory that the lake carriers and the freshwater sailors who man them are useless on the high seas.

Parthia Errata

This magazine is known as an authoritative source of information on the North. For that reason, it was a bit shattering to receive a succession of letters, bemoaning some statements that we published last issue about S.S. *Parthia*, from some top experts on the subject. In order of receipt, these letters came from George M. Douglas (a contributor to that issue); W. Kaye Lamb, the Dominion Archivist who was formerly Provincial Archivist for B.C.; and James H. Hamilton of Victoria, editor for 26 years of *Harbour and Shipping*. The two latter have both studied the *Parthia* story in detail, and written about it.

We sent their comments to the author of the article, and we hope to carry an account of their objections and his defence in the next *Beaver*.

NORTHERN BOOKS

THE FRENCH CANADIANS 1760-1945, by F. Mason Wade. Macmillans, Toronto: 1955. 1136 pages. $6.00.

Reviewed by George Ferguson

THE chasm between English and French Canadian thinking has been one of the major tragedies of our nation's life. Because of their different backgrounds and because of the difficulties of language, the two races which dominate our national existence drift apart by almost imperceptible stages, and when the drift has proceeded far enough, a crisis ensues which tears the nation asunder. It then takes years and years of patient effort to bring them together again. The supreme merit of Mason Wade's history of French Canada is that, written in English, it makes available to the majority of the country the drives and motives which stir French Canada most profoundly.

Henceforth ignorance will be no excuse. This is a clear case of the past dictating the future. If we stumble into crisis hereafter, it will not be the fault of Mason Wade. He has done a job which no historian will have to do again. He has corrected balances which have been long out of line; and it is one of the great merits of his book that the balances he corrects are not all on the English side. He has shrewd comments to make upon the faults into which French Canadian historians have fallen too. This has been recognized in French Canada. The reviews of his book in the Quebec press note this fact.

The real learning, however, has to be done by English Canada. Comparatively few English-speaking Canadians yet recognize that there can be no Canada in any real sense of the word without recognition of the fact that the country is, in fact, bilingual and bicultural. Those who do recognize it, often fail to take into account the obvious consequences of the fact. This may be noted on the radio of an evening when the English Canadian fails to understand that "*Ici Radio Canada*" is as proper a way of announcing or terminating a program as the more familiar "This is the Canadian Broadcasting Corporation."

Too many English Canadians—more than French Canadians—are xenophobes. Too many of them also equate French Canada with their Protestant distrust of the Catholic Church. If they read Mason Wade's book, they will discover that the Vatican has, broadly speaking, played a noble role in the creation of Canadian unity. The so-called nationalist forces in Quebec have appealed again and again to Rome. The answers they have received have been dusty indeed. The Vatican and the hierarchy both—with exceptions to be sure in the latter category—have recognized always that racial, lingual and religious accommodation has been essential to the continued existence of the Canadian state.

What is interesting about English Canada's reactions to French Canada is that, where there has been understanding, the English-speaking Canadian has responded well to the instincts, the needs and the ideals of their French-speaking fellow-citizens. Mr. Wade has gone a long way to destroy the Quebec legend that, immediately after the battles of 1759, the English conquerors sought to impose their Anglo-Saxon, Protestant background upon the French colonists. The fact is that Murray, Carleton and Haldimand had a deep comprehension of Quebec's needs and aspirations, and did much to persuade the British Government that the best way to govern its newly acquired colony was to meet them. Other governors like Metcalfe did not, and the consequences became at once apparent.

Readers in western Canada will be particularly interested in learning Mr. Wade's appraisement of the episodes surrounding Riel and the Manitoba school question. These were critical points in our national history, and neither redounds to the advantage of the English Canadian. French Canadian spokesmen have said many bitter things about their English-speaking compatriots, but it is difficult to rival the comment of the *Toronto News* which declared that Riel should be strangled in a French flag, the only good use such a rag could be put to. The fact is that Riel, mentally deranged, did not deserve the treatment he got, and it is equally clear that Sir John Macdonald, great as he was, never was able to replace the loss he suffered in the death of his close friend and greatest colleague, Sir Georges Etienne Cartier. The old master's touch lost its magic when Cartier died, with incalculable consequences to the future of the country. One reflects how fortunate was Mackenzie King that Ernest Lapointe, a true disciple of Laurier, saw him through the years of his ascendancy from 1919 to 1941.

Henri Bourassa emerges from Mr. Wade's pages as a prophet, yet a seer who lacked the practical capacities of a Laurier and who therefore stood always on the fringes of political power. Yet middle-aged and aging English Canadians who were brought up to believe that Bourassa was something akin to a fiend will find the evidence in *The French Canadians* that he was a man who accurately foresaw the future and had a vision of Canada which has been, in many respects, realized. Bourassa's followers, like most disciples, were not the equal of their leader. Yet Bourassa's vision remains an adequate inspiration for a far-sighted Canadian nationalism.

It is strange to reflect that he tore the leadership of French Canada from Laurier's hands, yet that Laurier, with his "sunny ways" policy, remains a figure which will always loom larger in the history of Canada than will the name of Henri Bourassa. The intellectual and the demagogue bow before the man who sought and found the practical means whereby peoples of divergent growths can live, as, fundamentally, they want to do, amicably together. Yet it remains true that if Canada, even today,

Mr. Ferguson is editor of the Montreal Star.

were to accept more of Bourassa's legacy, the nation would find its future easier and more smooth. The school problem, with its inextricably mingled ethnic and religious strands, has not yet been settled in a way satisfactory to the minority of the country. In view of the fact that the majority, in times of crisis and war, makes so big demands on the French minority, it is time for it to make due concessions in fields less important to the future of the country as a whole.

The Hudson's Bay Company emerges with credit from Mason Wade's history. References to it are limited to the circumstances surrounding the Red River Rebellion of 1869-70 and the Northwest Rebellion of 1885. Its very presence on the Prairies was resented by the Métis who had preferred the Nor'Westers with their direct Canadian links with Quebec to the Company which had for so long operated from Great Britain through Hudson Bay. But the record is clear that, when crises developed, the Hudson's Bay Company men who were on the spot and who knew the French-speaking men they worked with were always on the side of moderation and good sense. Had their advice been taken instead of the adjurations poured out of Manitoba by men dyed with Ontario Orangeism, the problems which, in the event, tore Canada apart would never have occurred.

This is a point raised earlier in this review—that understanding modifies policies and that prejudice is not a safe basis on which to build a nation. In these respects the advice of men like Mactavish and of Smith was worth much more than the attention paid to it.

BEHOLD THE SHINING MOUNTAINS. The travels of Anthony Henday, 1754-5, by J. G. MacGregor. Applied Art Products, Edmonton. 276 pages.

Reviewed by Clifford Wilson.

BEFORE this book was published, the amazing journey that Anthony Henday of the Hudson's Bay Company made two hundred years ago, from Hudson Bay to within sight of the Rockies and back, had not received much notice in print. In 1908 one version of his journal edited by L. J. Burpee was published by the Royal Society of Canada; Prof. A. S. Morton devoted seven pages to the journey in his *History of the Canadian West*; and Douglas MacKay gave it a couple in his *Honourable Company*. But that was about all. Mr. MacGregor has gone into the question of Henday's route more deeply than anyone, and this book gives the results of his researches in the library and in the field.

Especially in the field. The author spent many weekends during 1953 trying to follow Henday's travels from Saskatoon west, and north to Edmonton, and he has brought to his task of interpretation an intimate knowledge of the Saskatchewan and Alberta countryside. On the whole his interpretation agrees with that of Prof. Morton who, like Mr. MacGregor, had access to all three edited versions of Henday's journal which are preserved in the archives of the H B C. These versions constantly contradict one another, especially in regard to daily distances travelled and changes in direction, and only by knowing the features of the terrain through which Henday travelled can one form a reasonable idea of what he was talking about.

Mr. MacGregor's research, however, has by no means been confined to field observations. He has read widely among the authors of old who knew the country and the tribes through which Henday passed, and where Henday's own accounts lack descriptive material, he has called on the accounts of James Isham, Alexander Henry the younger, and other reliable writers to supply it.

But beyond that, where there are no historical records to keep his feet on the ground, Mr. MacGregor sometimes takes off on flights of fancy that come perilously close to the rarefied air of fiction. With no other basis, for instance, than Henday's reference to a country wife whom he acquired on his travels, he goes into some detail about the marital side of the young man's adventures. We are even told that "His black-haired companion was probably sixteen, and undoubtedly was beautiful, shapely and agreeable." One feels that this is not the kind of detail of which a professor of history, for instance, would approve (at least, not as history); but perhaps Mr. MacGregor felt that something of this sort was needed to lighten what might otherwise be a rather heavy discussion. Probably for the same reason he inserts from time to time descriptions of the traveller's surroundings, both floral and faunal; but here he is on safer ground, and his obvious delight in the countryside of today lends life and reality to these passages.

Careful maps have been drawn up to illustrate Henday's line of travel from Saskatoon to the country west of Red Deer, Alberta, and north to Edmonton, and clearly show the author's interpretation of the route this "first white Albertan" probably followed two centuries ago.

Mr. Wilson read a paper to the Canadian Historical Association last year on Henday's travels.

THE PRESENT STATE OF HUDSON'S BAY "Containing a Full Description of That Settlement and the Adjacent Country; and Likewise of the Fur Trade with Hints for its Improvement, &c." by Edward Umfreville. Edited with an introduction and notes by W. Stewart Wallace. The Ryerson Press, Toronto, 1954. 122 pages. $10.00.

Reviewed by Lewis H. Thomas

PRIOR to the reprinting of this book our knowledge of Edward Umfreville was based on the researches of two Canadian historians, the late Professor A. S. Morton and Professor Richard Glover, both of whom have made extensive and laborious examinations of the archives of the Hudson's Bay Company as well as other collections of primary source material. In his *History of the Canadian*

Mr. Thomas is provincial archivist for Saskatchewan.

West to 1870-71, Professor Morton describes Umfreville's activities as a servant of the Hudson's Bay Company and later of the North-West Company, and characterizes him as "a man of considerable talent." Umfreville's book, published in London in 1790, he dismisses as inspired by the author's quarrel with his former employer. "It is," he writes, "the first, but by no means the most substantial, of a long series of pamphlets, which are more or less propaganda against the Hudson's Bay Company, and which were devised to win the favour of the public for the North West 'concern'."

Richard Glover in his introductions to the two volumes of *Cumberland House Journals and Inland Journals, 1775-82* (published by the Hudson's Bay Record Society in 1951 and 1952) has discussed in detail the reliability of *The Present State of Hudson's Bay*. It is apparent from his careful and penetrating analysis that Umfreville is a useful witness, but one whose evidence must be used with caution. And he has completely demolished Umfreville's intemperate criticisms of the governor of York Fort, Humphrey Marten, contained in the chapter entitled "Some Account of the Company's Officers in the Country . . .".

In view of all this, it is more than surprising to find this reprint of *The Present State of Hudson's Bay* presented with almost no critical editorial apparatus. The six and one half pages of introduction do not contain an estimate of the qualities of the book as historical source material. The editor has completely ignored Professor Glover's research, and has used Hudson's Bay Company archives only in the form of a "memorandum regarding Edward Umfreville" supplied by the Company archivist.

For an account of the activities of Umfreville on the North Saskatchewan and the circumstances under which he served the North West Company there, we must still rely on Morton's work. The editor, fortified with his "memorandum" from the Company archivist, questions the general reliability of Morton's description of Umfreville's activities. Though there is one error in Morton's account (the date Umfreville left the service of the Hudson's Bay Company) there is no reason to question the rest of his statements; he at least consulted the primary sources instead of relying on memoranda secured from archivists, who usually do not have time to provide exhaustive answers to all inquiries.

A little over one third of *The Present State of Hudson's Bay* is given over to descriptions of natural history, Indian tribes, and the geography of the area between the Bay and the Rockies. These are undoubtedly the most valuable and reliable portions of the work, and it appears that Umfreville's are the first published descriptions of the Rocky Mountain goat and the grizzly bear. He was also the first to distinguish between the Mule Deer and the Whitetail. In this edition, however, no effort is made to indicate which descriptions are original work and which are borrowed from Andrew Graham and James Isham (see Hudson's Bay Record Society, vol. XIV, p. xviii, footnote 4).

Father D'Eschambault is Manitoba's representative on the Historic Sites and Monuments Board of Canada.

LE MOYNE d'IBERVILLE, SOLDIER OF NEW FRANCE by Nellis M. Crouse. The Ryerson Press, Toronto, and Cornell University Press, Ithaca, N.Y. 280 pages. $5.00

Reviewed by Antoine d'Eschambault.

NELLIS M. Crouse is a well-known specialist in the field of early North-American history; he is the author of two valuable works on the search for the Western Sea and the North West Passage, and two others, perhaps even more valuable, because dealing with a subject less known, on the early French activities in the West Indies. Because of his vast knowledge of both regions, Mr. Crouse has been led to write the biography of the fascinating Pierre Le Moyne d'Iberville, whose influence was felt precisely in North America and in the West Indies. In fact, one gathers the impression, in reading this well-written book, that Mr. Crouse is more familiar with d'Iberville's field of action than with the hero himself.

Parkman has spoken with admiration of the martial qualities and the loyalty of the *petite noblesse*, who served in New France—men like La Salle, the Tontys, Dulhut, Louvigny, La Forest, the La Vérendryes and many others. France had no more devoted sons than these indomitable soldiers who, with an eye to glamour, might richly deserve the epithet applied to the soldiers of Francis I by their Italian enemies: *La Furore Francese*. There was much of that *furore* in Pierre d'Iberville and his brothers, the officers and men who served under him.

Of special interest to students of Western Canadian history is the narrative of the Hudson Bay campaigns. Here d'Iberville displayed his skill and versatility. It has often been pointed out in his case, that there was little merit in capturing trading-posts, manned by clerks and tradesmen. True, but d'Iberville also attacked mighty ships and trained sailors, and often at great odds. His record of victories is amazing. Whether the great Canadian hated the English as Crouse believes, or whether he saw in them only enemies of his country, as Frégault in his biography of d'Iberville contends*, is a secondary question. He saw the danger of English encroachment from the east, the middle-west and the north and constantly kept the attention of the French authorities focused on this menace to the very life of New France. He died before the Treaty of Utrecht and was spared the humiliation of the surrender of Acadia and Hudson Bay, sectors where he had been repeatedly victorious.

Mr. Crouse describes d'Iberville not only as a daring captain and a crafty navigator but as a man of vision whose knowledge of navigation, military operations and statesmanship were equally remarkable. His most lasting work was the Louisiana colony and d'Iberville proved himself as much at home as a colonizer, as he did in the role of a frontier-life chieftain. However, Mr. Crouse's book, scholarly though it may be, leaves a few questions unanswered. Was d'Iberville's idea of a distinct colony along the Mississippi a sound one? Talon had, quite early, pro-

*Guy Frégault: *Iberville le Conquerant*. Editions Pascal, Montreal, 1944.

posed to make of the Mississippi the western boundary of the French colonial empire in America, and wished to link it to Quebec by a series of forts and establishments; and the thought here also was of curtailing English and Spanish expansion. Instead, d'Iberville and Bienville founded a new autonomous colony, far from Canada and independent of the Quebec authorities. Eventually Louisiana was settled largely by Canadians, fugitive or otherwise. Was it wise or sound, in the face of English expansion, to divide and weaken Canada?

Parenthetically it might be added that I have a personal interest in the LeMoyne story, since Charles LeMoyne, second baron of Longueuil and nephew of Pierre d'Iberville, married Catherine Fleury d'Eschambault, daughter of Joseph, my ancestor of four generations back, and I have in my possession some very interesting documents relating to the baroness. Following the death of her husband, she married William Grant; her only child, Marie-Charlotte, married David Alexander Grant, a nephew of William. Thus the title of Baron de Longueuil, the highest in Canada and the pride of the Lemoynes, passed to a Scotch adventurer recently arrived in Quebec. Such is the ransom of defeat.

Briefer Notices

RECOLLECTIONS OF A LIFE PHOTOGRAPHER, by Wallace Kirkland. Houghton Mifflin Co., Boston, 1954. 272 pages. $3.50

PICTURES by Wallace Kirkland, dean of *Life's* photographers, appeared in the pages of the *Beaver* several months before the modern *Life* was created. The issue of June 1935 carried an article by him describing a voyage he made "By Canoe to the Bay and Back" with a party of boys. Ten years later he was assigned by the magazine he now works for to do a photo story on the Hudson's Bay Company; but though he carried out that assignment with his usual imagination and thoroughness, the story never hit the pages of *Life*. V.E. Day pushed it out of the news picture so far that it never found its way back.

Probably that is one reason why "Kirk's" adventures with the Company of Adventurers are not even mentioned in the book (except in connection with a bottle of rum). However, of the 21 chapters, three are concerned with outdoor Canada—Operation Musk-Ox; a story of moose in Quebec; and the absorbing tale of "The Birth of a Dragonfly," which shows as well as any of them what immense amounts of patience and time a nature photographer must devote to his exacting tasks.

Twelve pages of the author's photographs appear in the front of the book. But one wishes there were more, because the reader is constantly trying to remember what the pictures in *Life* looked like that resulted from the expedition being described.—*C.W.*

THE MAMMAL GUIDE (Mammals of North America North of Mexico) by Ralph S. Palmer, 384 pages. Text, illustrations and maps by the author. Doubleday and Co., Inc., N.Y. and Toronto. $5.75

PAINTING, Sir," said Dr. Johnson, "can illustrate: it cannot inform." Without inquiring too closely just how the good doctor intended this—the less reverent might even classify it a Johnsonian wisecrack—it is certainly true that a mammal guide should do both. Dr. Ralph Palmer in this pocket guide has given his readers an extremely useful and accessible book. The range maps, showing the approximate areas in North America where one may expect to meet the various species are a most useful feature. The descriptions, habitat notes and general life history and identification are also very well presented.

The illustrations, however, are a disappointment. If Dr. Palmer intended them only as approximate colour diagrams of the various mammals, well and good; but in a book of this scope and price, something better ought to be offered the reader.The illustrations in the somewhat similar *Guide to the Mammals* by Burt and Grossenheider, 1953, more nearly approximate a colour presentation of real help to the student. It is not enough to say that even the casual student of zoology can distinguish between, say the bison and the moose by description alone, and that accurate drawings are therefore not necessary. If illustrations are to be used at all they ought to be good.

However, this criticism of the illustrations must not be construed as a condemnation of what is assuredly a very good book. No student will regret owning it. It is in reality a much more complete and documented reference book than either its pocket-book format or title would indicate.
—*Clarence Tillenius*

FIFTY YEARS IN ALASKA, by Carl J. Lomen. David McKay Co., Inc., N.Y., 1954. 302 pages. $4.00.

MOST of this book, as the title indicates, is about Alaska. But two chapters deal with the trek of the huge reindeer herd that the author and his brothers undertook to transfer from western Alaska to the Mackenzie delta, at the request of the Canadian Government. Reading these chapters, one is struck anew with the enormous difficulties that were encountered and overcome by Andy Bahr, the leading herder, and his Lapp and Eskimo assistants in this epic migration.

"A drive of the magnitude of this one," Mr. Lomen says, "had never before been attempted, so we had no previous experience to draw on." It was begun in December 1929, took a whole year to cover the first 200 miles, and was not completed until March 1935. They started with nearly 3,500 head, and finished with less than 2,400 of which only one tenth were "originals." The rest had been born on the long, long trail.

Incidentally, a four-part fictionalized version of the story appeared in the *Beaver* of 1934, written by A. R. Evans under the title *Meat*.—*C.P.W.*

Mr. Tillenius is well known to Beaver readers through his natural history drawings and writings.

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